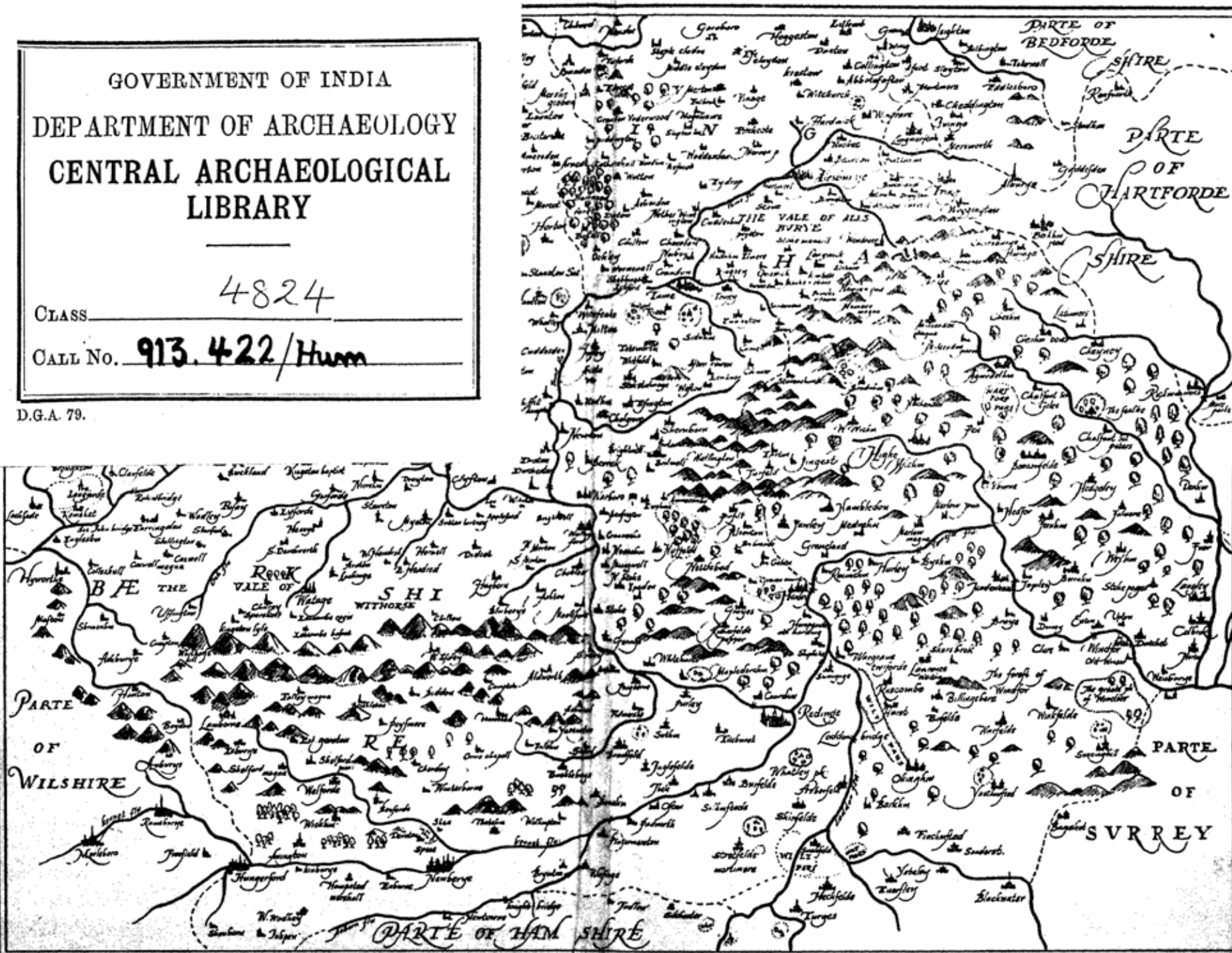


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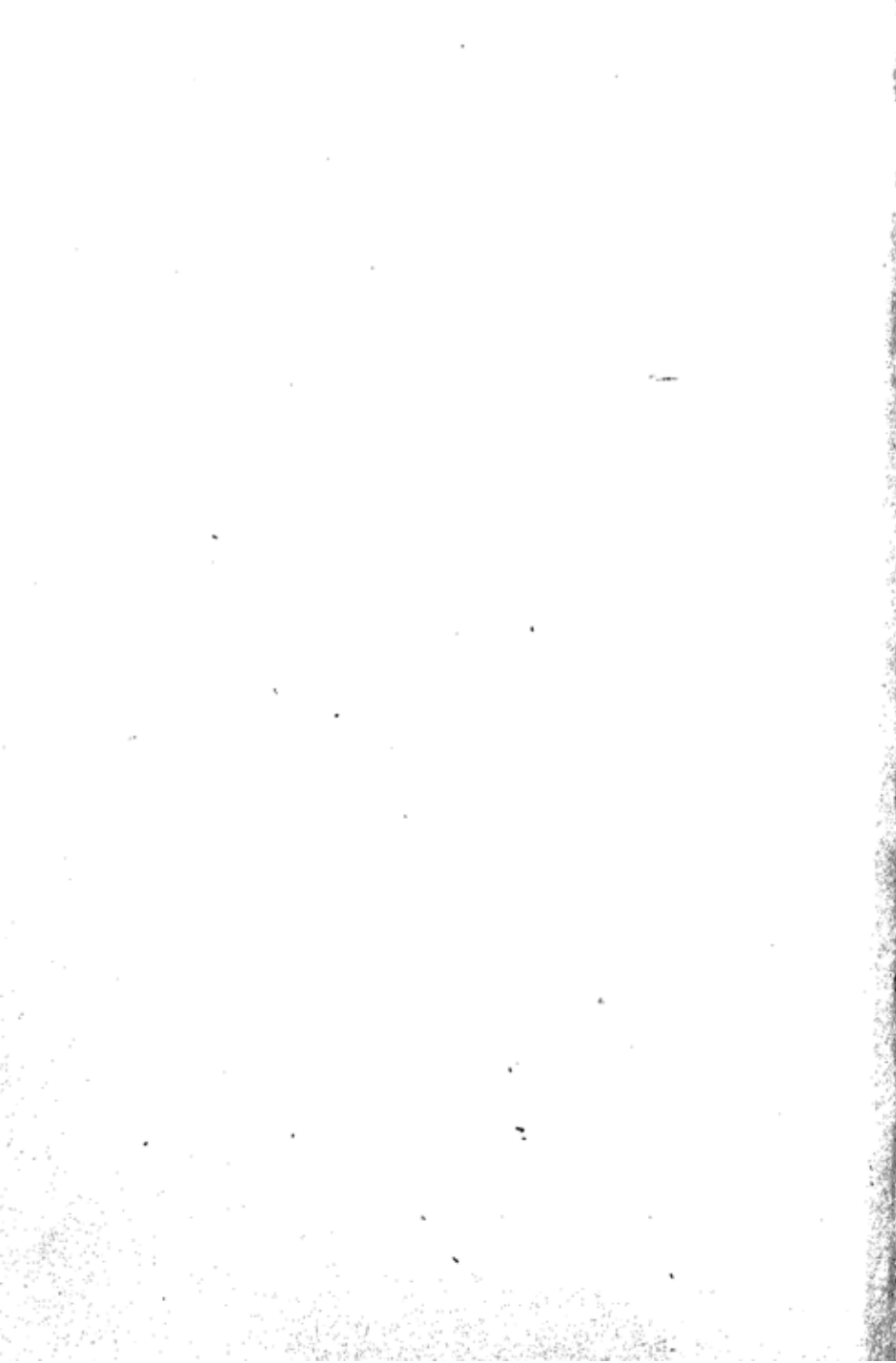
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TREASURE IN THE THAMES



TREASURE IN THE THAMES

By
IVOR NOËL HUME

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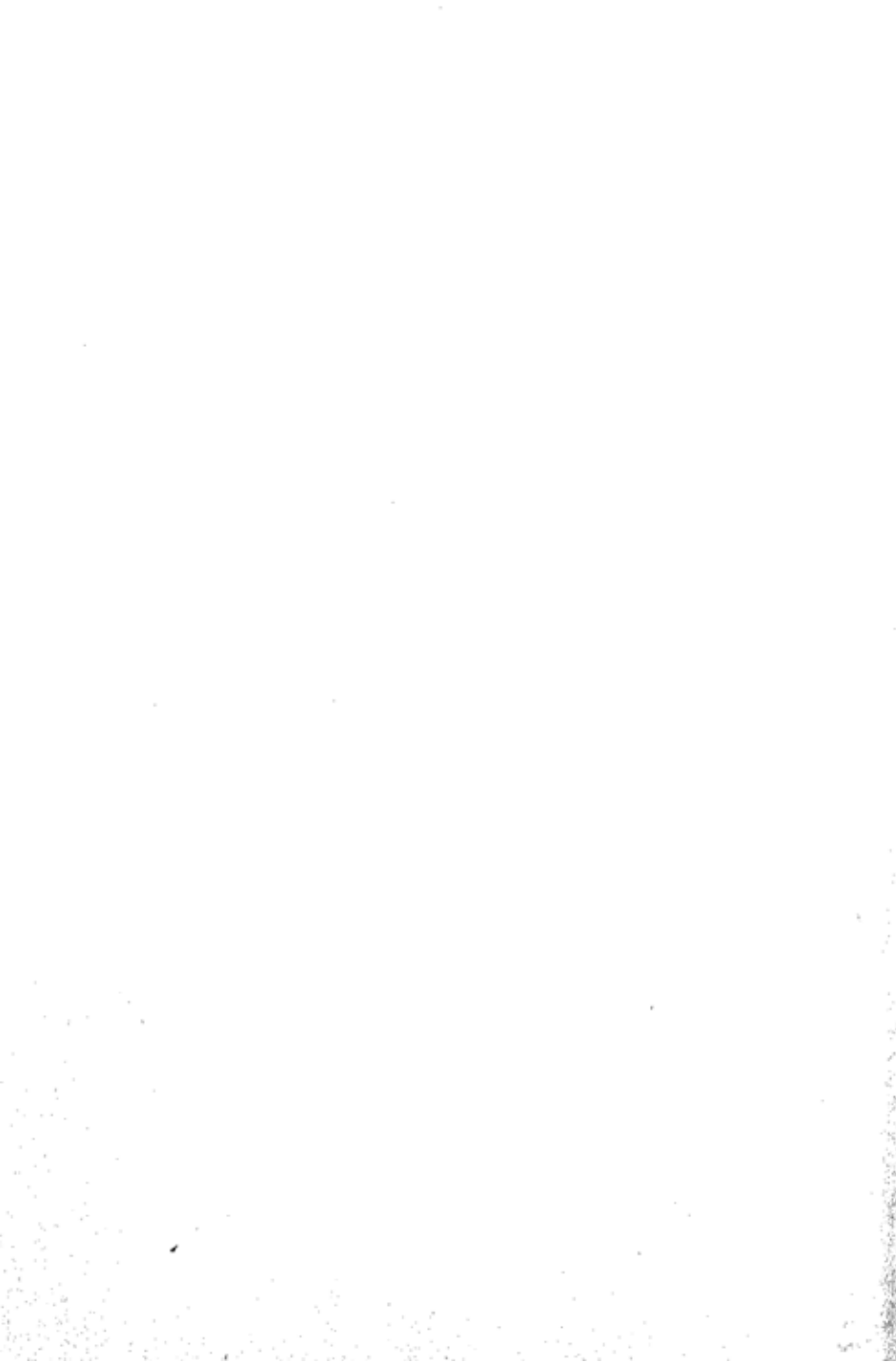
Preface

THE story of the Thames goes back into the mists of unrecorded time. But ever since man first quenched his thirst in its waters he has left his mark on the river-bed. Relics of every phase of development have been recovered and many now grace the show-cases of our national museums, while others have found their way into private collections. In this book I have endeavoured to gather together a selection of the more interesting discoveries so that, where possible, they can tell something of their story. However, the river's treasures are not confined to tangible objects, but also include memories of people and events. To avoid producing a mere catalogue of antiquities, I have woven them together to provide a layman's picture of the river throughout the years that man has known it.

There were two methods of approaching the subject, the academic and the popular. Having chosen the latter I must be excused for not having quoted my sources and references. I must hope that the majority will already be familiar to those whose interests are strictly archaeological or historical.

I.N.H.

April, 1955



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The end papers are reproduced from Christopher Saxton's *Atlas of England and Wales* (1579) by courtesy of the Trustees of the British Museum.

Finally, I should add that without the constant encouragement of my wife this book would have remained unwritten.

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Introduction

THE word treasure must surely be one of the most provocative in the English language, for there can be few of us who have not at some time in our lives dreamed of finding buried treasure. When we read of expeditions setting out for the jungles of central South America in search of El Dorado, or sailing to Tortuga in a quest for pirate gold, how many of us wish that we could throw up our mundane jobs and go along? But not all treasures are of gold or silver, and there are some that can only enrich us with knowledge. It is in no sense an anti-climax to admit that many of the treasures from the Thames belong to the latter category. Some are, of course, of great artistic merit and consequently of considerable monetary value; but most of them are of rusting iron or shattered pottery, valuable only as clues to the events of the past.

From the beginning of man's sojourn in the Thames Valley the river has provided a defensive barrier, a hazard to travellers and a communal rubbish tip. Each of these rôles has claimed for it a share of man's weapons, tools, household goods, clothing and trinkets. Some of the objects are relics of battle, of nocturnal forays on riverside wharves or of accidents at the fords, while many more were deliberately thrown into the water as refuse. Nevertheless the rubbish of yesterday is not to be sneered at, for it provides the museum treasures of today.

It is true that the most spectacular finds were recovered during the nineteenth century as a result of extensive dredging,

bridge-building or wharf construction. Today, regardless of the extensive damage to the river frontage at the hands of the Luftwaffe, there are fewer opportunities for new finds to be made. It is unlikely that many new bridges will be constructed in the near future, and, although rebuilding has been completed on a number of blitzed warehouse sites, new methods of excavation have proved less archaeologically rewarding than the old. While dredging is constantly in progress, its purpose is generally to maintain a series of already well-scoured channels. This is happily less true of the upper reaches than the lower, and in consequence recent years have seen the discovery by the Thames Conservancy Board of a number of exciting finds, while very few have been recovered by the Port of London Authority. These two bodies control the Thames from mouth virtually to source; the latter being responsible for the tidal reaches extending to Teddington, while the river from there to Cricklade is the responsibility of the Conservators. Both authorities are keenly aware of the possible importance of the many antiquities yet to be found, and both make every effort to ensure their preservation. One has only to recall the readiness of the P.L.A. in 1955 to offer every assistance and facility when the presence of a Romano-British settlement was suspected on the foreshore near Isleworth to realize that the guardians of the river's future still find time to care for its past.

Even if we are pessimistic enough to admit that the hey-day of the great river discoveries has passed, we cannot ignore the thousands of lesser finds that have been recovered since the Second World War. These minor treasures have been found not by builders, dredgers or even skilled archaeologists but by enthusiastic amateur antiquaries who have discovered the strange hobby of mudlarking. Walking and sometimes wading over the muddy foreshores they search for evidence of the past, for Roman coins, mediaeval buckles, Tudor buttons, Stuart pottery—anything that can remotely

claim to be a relic of the river's history. Many of these finds have been presented to museums and subsequently placed on exhibition, while others, unfortunately, have fallen by the wayside, the mudlark having lost interest in his exhausting hobby.

Magazine articles, talks on the radio and television have all served to introduce the mudlark and his treasures to a wide public. It was round the writer's own experiences in that field that this book began to be written. However, as the inevitable research progressed, a much broader picture began to unfold, ruthlessly pushing the mudlark into a minute corner of the canvas. Hundreds of half-forgotten finds were recalled from the pages of dusty archaeological reports or from the more colourful press accounts; many are still to be seen in the museums that have stored them for more than half a century, while others have been lost into the darkness whence they came. Yet they all clamour to be numbered among the treasures of the Thames. The problem was not to find enough to fill the book, but how to make excuses for the scores that have been left out.

London must inevitably play a disproportionately large part in the story, for the City and the Thames are irrevocably wedded. But the story of the river and its treasures does not start with London or even at the beginning of recorded history. It goes back into the remote past, before *homo sapiens* even existed, to a time when the first river cut its way through the London Trough. If we have to start with a date, we could say that the first chapter began around a million years ago.

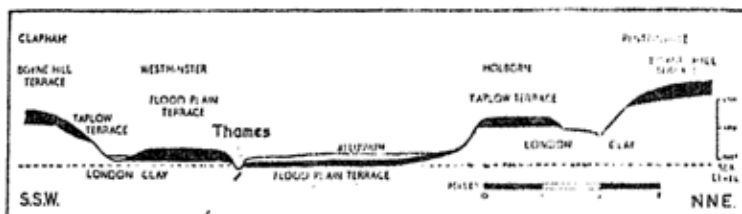


Mammoth, Men and Water-Clocks

LOOKING down on London from an aircraft, or even peering out over the City from St. Paul's or the top of the Monument, it is hard to realize that the view could ever have been any different. Yet, in geological time, London was only built yesterday, and it was little more than a few months ago that man first walked in the Thames valley. To go even farther, it was not so very long ago that there was no valley at all. To that extent, you might say that we are still just beginning. Our nuclear fission, hydrogen bombs, supersonic aircraft and all the rest of it are just the toys of obstreperous children who have yet to grow up. It is, perhaps, the fear of what we may do in the future that encourages some of us to look back over our shoulders and find pleasure in the past.

There is little to be gained by entering into a complicated discussion concerning the geology of the Thames basin before the river existed. It must suffice merely to say that at some time in the remote past, millions of years ago, the chalk which lies beneath London was deposited when the older rocks under it were still below the sea. Eventually, after the chalk had formed, a land movement raised it above the water, while another depressed the centre to form the bed of what we now know as the London basin. For a long time the depression lay beneath comparatively shallow water, which in its turn caused layers of sand and clay to be laid down. Later, in the geological period known as the Eocene,

the bed sank farther and permitted the London clay to form. Later still, when the Eocene sea had receded, further earth movements formed a valley through which a great river flowed eastward to the Rhine. This was the stage that was reached a million years ago, and there was as yet no sign of man. It was not until the last geological phase, the Pleistocene, that he first appeared on the scene; but even then he had a long way to go before he was anything more than just another brand of fossil. It was during the same period that the river began to cut its way down through the soft strata of the basin leaving behind a series of gravel-covered terraces (Fig. 1), the first of which stretched from Hampstead to



1. Sectional diagram of Thames river terraces at London.

Croydon. This does not mean that the river flowed over the whole width at any one time, but rather that it meandered from side to side, constantly cutting new channels and silting up the old. But, with these reservations, it does still mean that the Thames was very much wider than it is today.

Eventually the river cut itself so far into the London clay that it left its earliest silt and gravel high and dry. On this, the Upper or Boyne Hill terrace, lived the earliest human inhabitants of the Thames valley. This was about five hundred thousand years ago. No human remains have survived from this earliest stage, although until recently many people accepted the Piltdown fragments as being of that date.

To have lived in the Thames valley some five or six hundred

thousand years ago must have been, climatically at least, quite a pleasant experience, for at that time it enjoyed a semi-tropical climate. But with the spreading of the polar ice cap, temperatures gradually fell until the lush, semi-jungle flanking the river changed to a tundra vegetation of moss and lichens. This transformation took thousands of years to complete, during which time the Thames was carving out two further terraces known as the Middle and Lower, or the Taplow and Flood Plain. In the broadest terms it can be said that the temperature and terraces paired as follows: warm and Upper, cool and Middle, arctic and Lower. Although this appears to be a simple progression, it is not, in fact, the case; for the glaciers moved forward and retreated three or four times until at some date about twenty thousand years ago they began to recede for the last time.

It was on the Middle terrace that man began to come into his own, and it is from the flint tools that he left behind that we learn of his increasing technical skill and adaptability. While his predecessors may have valued fire, there is every likelihood that he now knew how to make it. He lived in caves when available, and wore skins to keep him warm. His carefully fashioned flint weapons put him on a level footing with the great animals that still roamed the Thames valley. It was still a world ruled by the animal law of "kill or be killed", but by now man was emerging as the master. He fought and killed the giant mammoth, slew the woolly rhinoceros and could afford to ignore the spluttering hippopotamus as it wallowed in the muddy shallows of the Thames. He hunted the deer, the horse and the musk-ox for his food, and saw in the ferocious grizzly bear a new fur coat for his wife—providing always that the bear failed to see him first.

As century followed century, the Thames cut farther into the basin leaving behind the Lower terrace on which new animals began to appear, among them the hyena, the great elk and the lion. The reader who believes that the only lions

that ever sat in Trafalgar Square were put there by Sir Edwin Landseer would be wrong. Bones of the lion have been found in terrace gravel both there and in Fleet Street, while a rhinoceros lay down and died in Pall Mall. Bones of another were found under the Old Bailey, and remains of a hippopotamus were uncovered in Waterloo Place. After the war excavations for Lloyd's new building in Lime Street unearthed a rib of a whale, a relic perhaps of a visitor who made his way up-river only to be stranded in the shallow water. One can imagine the battle between fear and curiosity that went on in the minds of our ancestors as they watched the huge monster fighting for its life, blowing and beating the river to a foam with its tail until it lay exhausted on the shore. Perhaps Londoners were then able to taste whale meat for the first time.

The committee of Lloyd's have always been keenly interested in the history of the ground on which their buildings stand, and have given every facility for experts to watch the excavations. In 1925, when their huge Leadenhall Street building was under construction, bones of mammoth and woolly rhinoceros were found in the gravel and blue clay. But much more exciting was the discovery of part of a human skull which, from its position in the clay, could have been up to about a hundred and twenty thousand years old; although a conservative estimate put it at about fifty thousand. That would have made "The Lady of Lloyd's" (the skull was thought to be that of a woman) the oldest human fragment ever discovered in Britain. Recent research has, however, thrown some doubt on the skull's antiquity. Similar tests to those carried out on the Piltdown skull showed that the Lloyd's fragment was unlikely to be nearly as old as the rhinoceros bone with which it is said to have been found. It is possible that the fragment was disturbed during the excavations and had come from a higher level, in which case it probably belongs to the comparatively recent Mesolithic

or Neolithic eras. But even if the Lloyd's lady cannot be more than five or ten thousand years old, the Thames gravels contain a wealth of evidence to prove that man was busy on the Lower terrace a hundred thousand years ago.

What, may we ask, did these early people look like? And how far had they come on the road to civilization? Numerous reconstructions have been made from remains discovered in Europe, and by now every schoolchild is familiar with the features of Neanderthal Man, with his huge, beetling brows, sloping forehead and lack of chin. When one sees models of him in museums it is often hard to imagine that we could ever have looked like that. It is not until we leave the museum and find someone sitting next to us on the bus with those same characteristics that we realize that facial features vary a good deal even within our own race.

Archaeologists have called the whole period of man's evolution that lasted until the ice receded the Palaeolithic era, and this has been sub-divided into cultural stages derived from the study of the artifacts he left behind. The Palaeolithic is more popularly known as the Old Stone Age, and covers by far the longest chapters in man's story. It is only comparatively recently that he has passed from the Old, through the Middle into the New Stone Age; these last being known to archaeologists as the Mesolithic and Neolithic eras. The Mesolithic began about ten thousand years ago and lasted without many sweeping changes until about 2300 B.C. The people of the Thames valley were then hunters who lived on the banks of the river, or in the forests, and used flint and bone weapons. The huge animals of the Palaeolithic era had departed to warmer climes or had become extinct, leaving the population to adapt itself to chasing the more elusive forest creatures—the red deer, wild pig, the beaver and so on.

As soon as the first Neolithic settlers from Europe began to arrive in Britain the entire picture started to change,

for these people brought with them domestic animals and the knowledge of how to make the soil produce food to order. In short, they were farmers. The Thames at that time was not so very far removed from the river we know today. It was wider and less deep, but it flowed in the same bed. There were no more terraces to cut, and therefore we can assume that Neolithic fishermen harpooned their lunch in the same waters that are fished by modern anglers. At first sight this may not seem important to the story, but it is. The relics of Palaeolithic man are found, as we have seen, on the river terraces, but they also turn up in the modern river. The reason for this is simply that erosion, brought about largely by the melting ice, carried débris from the upper terraces down on to the Flood Plain and into the modern bed. The many Palaeolithic flints that have been found in the river are therefore intrusions and are not part of the story of the Thames as we know it.

Before going off to trace the chronology of events that followed the arrival of the first Neolithic pioneers, it seems reasonable to pause and consider how the relics of these people and their successors came to be discovered and where they are now to be seen. Taking the last question first, the collections in four museums are outstanding: those in the British Museum, the London Museum, Reading Museum and, less known but no less important, the small museum at Brentford Public Library. Practically all the Thames relics in these collections were brought together as a result of the generosity of a handful of antiquaries who spent their time and money recovering the objects from the many labourers, dredgers and boatmen who discovered them.

Three names are outstanding among the many people who have concerned themselves with the Thames' treasures. In the nineteenth century there were Thomas Layton and Charles Roach Smith, and in the present century, the late G. F. Lawrence. All three have been attacked by fellow

antiquaries for one reason or another, but the fact remains that without them our museums would be considerably the poorer. G. F. Lawrence worked partly on behalf of the London Museum, where he was Inspector of Excavations, and partly on his own behalf. For many years he was responsible for watching building excavations in the City, but his discoveries there were rather less spectacular than those from the river. Roach Smith did very much the same thing, watching both the Thames and excavations in the City. He, however, was a chemist by profession and an antiquary only by inclination. He was particularly concerned with the recovery of a long series of important Roman relics found during the building of the present London Bridge, and so does not belong to this chapter.

Thomas Layton, like Roach Smith, was a private collector and had no ties with any particular museum, although from time to time both men presented important river treasures to the British Museum. Layton, who lived at Brentford, rarely spread his net as far as the City, being content to make the river from Richmond to Wandsworth his own particular province. He was well known to every Tom, Dick and Harry who had the slightest connection with that stretch of the Thames, and as soon as a relic was found the cry would go up, "Take it to Mr. Layton", and Layton never let them down. By Victorian standards he paid highly, for he knew that as long as he did so, he would be the first collector to see any new discovery. It was the same policy that was later to be followed by Lawrence, and it rarely failed.

There were few educated Victorians who were not smitten with the urge to collect, and the possession of a "cabinet" became almost a hall-mark of erudite gentility. But Layton, not content with filling one, two or even three cabinets, went on to stack his entire house with treasures until, eventually, they overflowed into the garden and had to be stored in no less than thirty sheds. The man himself developed into a

recluse, living in a little world of his own, surrounded by tea-chests filled with antiquities that he never looked at from one year to the next. Not content with his river finds, he branched out into collecting specimens from abroad, painted urns from Greece and Southern Italy, grave figurines from Egypt, pottery flasks from Peru—anything that took his fancy. When his labourer friends from the river were working on London building sites Layton was still in the market for anything they unearthed. Although many individual items are of some interest, none are in the running when compared with the importance of his collection from the Thames.

Occasionally Layton would lend a few of his treasures for exhibition at the meetings of learned societies, but the majority remained hidden away in the strange house at Brentford. It was not until he died in 1911 that the true extent of his amazing collection became known. His will made provision for the founding of a Layton Museum at Brentford, but for various reasons this was never possible. However, while the matter was under consideration, a number of skilled antiquaries were invited to assess the importance of the collection and to make a catalogue of the items. The task proved to be an almost impossible undertaking. Box after box was opened, each one filled with scores of flint implements, many of them rare and magnificent examples. Other boxes contained hundreds of complete or fragmentary metal objects, among which were no less than twenty-eight rapiers of the Middle Bronze Age, thirty-three Late Bronze Age swords, thirty-four spear-heads, half a dozen bronze sickles and innumerable lesser objects.

It is always possible to have too much of a good thing and, fantastic as it may seem, much of the Layton collection has that effect on one. To be able to see two or three fine bronze swords is one thing, but to have to inspect serried ranks of them is quite another. Nevertheless, the fact that

they were all found in the river was archaeologically interesting and important. It was hoped that when the full report on the collection was published we should be able to know exactly where each object was found and under what conditions it was recovered. But this hope was never to be fulfilled, for it turned out that Layton had kept very few records, save for the hand-written labels that were glued to some of the items. When these came to be unpacked after their long sojourn in the chests, the labels had decayed and the writing faded. In many cases it was impossible to tell which objects belonged to the river collection and which to the accumulation of miscellaneous purchases. Layton left behind a veritable forest of archaeological treasures, yet his methods were such that no one has ever been able to see the wood for the trees.

The entire collection is housed in Brentford Public Library, where it has been cared for ever since Layton's death. It rests there, laid out in rows of glass cases, appreciated by very few—a pathetic memorial to a misguided antiquary. It is still a breath-taking assemblage, but it is also a dreadful warning against the evils of collecting merely for the sake of collecting.

After the death of Layton the mantle and title of "workman's friend" fell on G. F. Lawrence. He was not himself a collector and so passed most of his finds either to the London or the British Museums, and to ensure that he would not be tarred with his predecessor's brush he published a long account of his discoveries. Unfortunately he had arrived a little too late, for although many of his finds were of considerable interest the great treasure-hunting days were nearly over. The first large-scale dredging operations in the reaches above London had cleared most of the antiquity-bearing silt, and the equally productive excavations for concrete embankments were coming to an end. There was therefore little cause to disturb the remaining untouched stretches of

shore and river-bed. Dredging does, of course, still go on today, but it is concerned primarily with the upkeep of existing channels.

The antiquaries who bought river finds from workmen have been bitterly attacked by their colleagues, who claim that they had no right to buy national treasures and absorb them into their own collections. No one can deny that the argument is perfectly valid; but had there been no private collectors, workmen would never have grown to appreciate the importance of what they found. It took years to educate them to the point where they could see pieces of bronze, iron, pottery or flint in terms of bottled beer. Very few of the old generation are still working and no private collectors remain to encourage the new. It is true that museums will still reward them for anything interesting they may find, but it is asking rather a lot to expect the workman himself to be able to decide what is and what is not interesting. It is asking even more to expect him to spend his leisure hours taking his finds to the museums on the off-chance.

In spite of our education, welfare services, pensions and so forth, life is probably less settled and predictable than it was five thousand years ago. It is even possible that some of us might have been happier in those far-off, unrestricted days, never having had to hurry for a train in the rush hour or to worry whether the television tube is about to explode. It would be foolish to pretend that life in prehistoric Britain was a perpetual bed of roses; the impressive array of weapons from the Thames is proof that it was not. But life without a little strife to garnish it might well have been thought dull. However, whether they enjoyed it or not, the evidence shows that our Neolithic ancestors had their share of fighting; not only amongst themselves but particularly when they found themselves defending their land against new and belligerent settlers from across the sea.

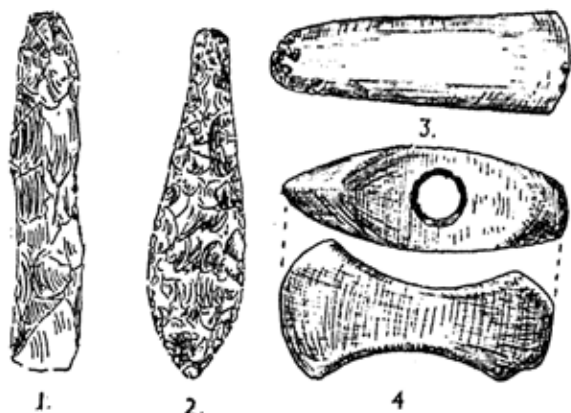
The invaders, known by archaeologists as the Beaker Folk,

began to arrive in the West Country from about 1800 B.C. They soon established there a firm foothold. Their importance lies in that they represent a link between the Neolithic cultures and the Bronze Age that was to follow, for although the Beaker Folk were not themselves metal-workers, they had had contact with metal and appreciated its importance.

While the influence of the Beaker culture was considerable in the west, it was less strong towards the east where the secondary Neolithic culture of the Peterborough people continued to thrive unchecked. The importance of the latter in the story of the Thames is simply that examples of Peterborough pottery have been found in the river at Mortlake, Hedsor and Wallingford. It so happened that when the first bowl was discovered at Mortlake the type was then unknown, and so archaeologists named it *Mortlake Ware* (Pl. II), thus recalling, for all time, its association with the river. The Beaker Folk too left their pottery in the Thames, and there are three fine examples in the Layton Collection and more in the London Museum. But although interesting in themselves they do not represent new types, and so cannot be ranked beside the more important though less attractive Mortlake find.

The Bronze Age in Britain is divided into three eras, known, not surprisingly, as Early, Middle and Late, and lasted until the fifth or sixth century B.C. Again it was a story of progressive cultures being brought here by successive waves of emigrants. But from our point of view the details are not important. It is enough to say that the Early Bronze Age is represented by the Beaker Folk and their successors who used the metal but did not make it, the Middle by people who cremated their dead and who manufactured swords and axes of bronze, and the final stage, the Late Bronze Age, when the metal became more readily available and was used for a variety of objects other than weapons. The progression from one period to another is well shown by the series of

metal weapons from the river, which become more numerous in each phase. Early Bronze Age weapons are rare, the finest example being a truly magnificent dagger, in the British Museum, which still retains its elaborately decorated hilt. During both the Early and Middle Bronze Age, swords and daggers were made in two parts, the blade and the hilt, which were joined together by two or three not very strong rivets. The weapons invariably came to grief at the juncture—making it a great rarity to recover an intact example.



2. Stone implements: 1, Neolithic "Thames Pick"; 2, Early Bronze Age flint dagger; 3, Neolithic polished axe, Teddington; 4, Early Bronze Age battle-axe, Battersea. *Brit. Mus.*

In the Middle Bronze Age we find an increasing number of daggers and narrow-bladed rapiers, along with large numbers of bronze axes or palstaves. But that does not mean that all stone weapons were thrown away (Fig. 2). On the contrary, many of our most impressive flint implements and weapons, notably sickles, scrapers and arrow-heads, were produced during the Early Bronze Age.

By the end of the Bronze Age, metal had become so popular that itinerant bronze-workers were able to ply their trade

up and down the country, buying up broken metal objects for remelting and producing new to order. It sometimes happened that the unfortunate craftsman was forced to hide his precious stock of moulds or scrap metal and for one reason and another never returned for it. One such hoard was found on the bank of the Thames during the building of Wandsworth gasworks, while a socketed axe-head and lumps of copper were found together on the bank at Battersea. By this time the bronze-worker's art was so well developed that the metal could be used to make a wide variety of objects—as the Thames has been only too ready to show. Outstanding is a magnificent cauldron (Pl. IIIa) made from a series of riveted bronze plates, and which was dredged up at Battersea in a wonderful state of preservation. This impressive find is now in the British Museum, along with an equally remarkable but much-patched bucket (Pl. IIIb) that was recovered from an unspecified reach of the Thames. The latter is closely paralleled by a fine example from a hoard discovered in Heathery Burn Cave, County Durham.

Circular shields, or bucklers, were part of the equipment of wealthy Late Bronze Age warriors, and two fine specimens found in the river are now in the British Museum (Pl. VII). One of them is particularly interesting, in that the style of decoration is closely paralleled on a famous bronze helmet that was found in a bog near Viksø in Denmark, and perhaps suggests cultural and trading relations between Britain and Northern Europe in the seventh century B.C. Unfortunately we have no details of where the British shield was found, save that it was dredged from the Thames and was received by the museum in 1862. In passing it is worth recalling that a fragment of a shield boss in the Layton Collection exhibits a rather similar, though more elaborately embossed, decoration. The other complete shield is of a less unusual pattern, but is notable for its excellent state of preservation and for a series of holes and gashes that may

perhaps be the relics of battle. Three carefully cut triangular holes are particularly curious, for they appear to have been made when the shield was still in service. The most likely reason for these seems to be that after a conflict in which the metal was pierced by sword thrusts, the owner deliberately cut the damaged areas out so as to prevent further splitting. Apart from these unimportant blemishes the shield is as sound as on the day it last went into battle. It is often considered an unforgivable sin for an archaeologist to take anything but a coldly disinterested view of the objects that he finds. But it would be a truly soulless antiquary who could hold this fascinating shield in his hands without once wondering whose life it must have protected or whose blows were rained on it.

Few details are available to tell us where this second shield was found, the records merely recalling that it was discovered in the Thames "off London". It later found its way into the Roach Smith Collection and reached the British Museum in 1856. Some years earlier Roach Smith had heard that a circular shield had been caught on a hook by an angler fishing from Old London Bridge, and he mentioned this find in one of his many letters that were published by the Society of Antiquaries. He did not, however, give any indication that he knew of the whereabouts of the shield or even that he believed the story to be anything more than an amusing legend. But the presence of the fine shield in his collection, and the senseless entry "off London" in his catalogue, suggest that there may be more to it than meets the eye. It is possible that Roach Smith later traced the shield to its finder and bought it for his collection. The catalogue entry might therefore be a misprint that should have read "off London Bridge". We shall never know whether this is the true answer; but if it is, then it must surely rank among the world's most remarkable fishing stories. A possible clue to the first British Museum shield is provided by Roach Smith's

catalogue, which mentions, without comment, the discovery of another circular bronze shield in the Thames near Woolwich in 1830.

It is probable that at least two other complete shields have been found. One example from Woolwich went into the collection of antiquities owned by Trinity House, but it is not clear whether this is the example referred to by Roach Smith. The second shield is more fully documented, the circumstances of its discovery being recorded in *The Gentleman's Magazine* (1865). In September 1864 the Thames was blessed with an abnormally low tide, and while the water was at its lowest ebb a boatman on the river somewhere between Hampton and Walton noticed a round object on the bed. After much fishing with his boat-hook he was able to recover the object, which proved to be a circular bronze shield. The find later passed into the hands of a Mr. Milner of East Molesey, where it apparently remained.

It would give an unfair picture to mention only the large and spectacular metal objects of the Late Bronze Age, for bronze was also used to make simple tools—chisels, gouges, hammers—the instruments that carpenters have used ever since carpentry began. There is a good range of these in the British Museum, one chisel from the site of the Tate Gallery being of particular interest in that it still retains its original antler handle. Another remarkable object in the same collection is a fine, decorated bronze knife, but although having a socket for a handle the wood or bone is missing. The interest in this case lies in the decoration of the socket. Socketed knives are never common, but as always in the Thames, degrees of rarity are turned upside-down, with the result that knives of this type are present in most collections from the river. In the same way bronze sickles are considered to be rare, yet the Layton Collection alone contains six examples. Having a rather more personal interest are a number of bronze razors, which also serve as a reminder of

the sharpness to which the metal could be ground. Razors fall into various distinct types, none of which look particularly inviting, each appearing more dangerous than the last. But it would be courting disaster to suggest that perhaps they were not razors at all but curriers' knives, for such heresy might be punishable by a practical and painful demonstration; therefore razors they must remain. There are at least three examples from the Thames in the British Museum, two in the Layton Collection and others in the London Museum; relics no doubt of Bronze Age beaux who shaved in the river before taking their girls for a walk through Kew Gardens! Why Kew, one may ask?—simply because two razors have been found on the foreshore in Syon Reach and another a little farther upstream towards Richmond.

Although metal objects of a non-military nature were becoming popular during the Late Bronze Age, they were still very much in a minority when laid beside the mass of weapons that has survived. We have only to recall the presence of thirty-three swords in the Layton Collection to find proof of this fact. Quantity, however, is not the only remarkable feature of Late Bronze Age weapons, for the period produced a new sword of a revolutionary type. In place of a thin rapier with its weak, riveted hilt we find strong, broader-bladed swords whose hilts were cast in one with the blades (Pl. XI). The old thrusting weapon was out and the new slashing sword was in—and a very formidable one it must have proven to be. No longer was there much fear of the blade and hilt parting company; and, as we know to this day, soldiers are better fighters when they have confidence in their equipment. So strong are some of these Late Bronze Age "leaf-shaped" swords that an example recovered from the Cambridgeshire fens was for years used by the finder to trim hedges before it came to the notice of a passing antiquary.

During the seventh century B.C. a new culture grew up in



I. Bronze cauldron of Halstatt type, made from a single sheet of metal. *Brit. Mus.*

II. Neolithic pottery bowl. From Mortlake. *Brit. Mus.*



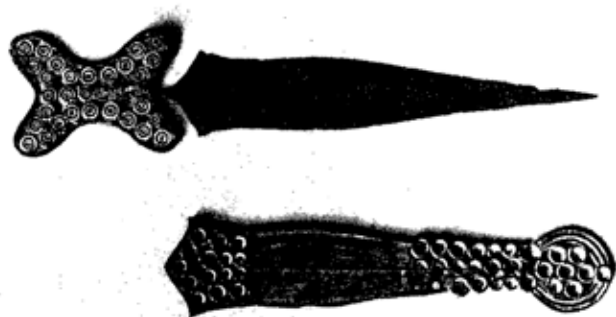
III. Late Bronze Age cauldron and bucket, the former from Battersea. *Brit. Mus.*



IV. Attic pottery
drinking vessel.
From Reading.
Fifth-century B.C.
Reading Mus.



V. Trojan or Italic
pottery cup. From the
foreshore at Barn
Elms. *Brit. Mus.*



VI. Iron Age dagger with bronze hilt and sheath. From
Cookham. *Brit. Mus.*

central Europe where people developed the use of iron, a metal that proved to be more readily obtainable and more easily worked than bronze. By the end of the fifth century B.C. offshoots of the European Halstatt culture found their way to Britain, carried here by new settlers from Northern France and the Low Countries. It was only to be expected that weapons would be the first to benefit from the new metal; but, as in the early Bronze Age, the first examples were imported into, rather than manufactured in, this country. There can be little doubt that the bronze-workers must have disliked the change, for many of them would have been unable to learn the new technique, thus leaving the field clear for continental smiths to settle in Britain.

The new iron swords from Europe possessed blades of greater length and cutting power than their bronze counterparts, but were often weak in the hilt, being riveted and having large, bronze pommels to help balance the blade. A finer and more attractive Halstatt sword is represented by a famous example from the Thames whose hilt terminates not in a pommel, but in a pair of long antennae that are typical of the late Halstatt era in Europe. This means that the weapon dates from the late sixth or fifth century B.C. and came to Britain at the beginning of our own Iron Age. A British warrior who had once seen a sword such as this would never again be happy with his bronze weapons, and no doubt there was a steady demand for new equipment. The bronze-workers, realizing that they stood a fair chance of being driven out of business, tried to keep step by producing bigger and better bronze swords. There are, incidentally, two fine examples of their new product in Reading Museum: one from the river at Henley, the other from Bray, both of which are much longer in the blade than their predecessors. Regardless of their efforts, the bronze-workers must have known that their days as weapon-makers were numbered. Eventually they took the only course open to them,

abandoning the manufacture of tools and weapons to concentrate on decorative work that could never be rivalled in iron. We have only to look at a few of their products in the later Iron Age to see how successful the new policy proved to be.

Here in Britain we have a reputation for starting behind the rest of the field, but arriving magnificently in the end. Being an island it was inevitable that we should receive the benefit of European cultures rather later than the peoples of the mainland. It is therefore only to be expected that when we were embarking on the Halstatt or Iron Age "A" phase, Europe was already absorbing the new La Tène culture, so named after a Swiss village where it was first identified. The latter finally reached Britain in the third century B.C., where it has become known as British Iron Age "B". Later, in about 75 B.C., the invasion of Kent by the Belgae of north-east Gaul began the last pre-Roman phase, known as Iron Age "C". The new Belgic invaders moved northwards from Kent, through the Thames valley into Hertfordshire, where they established their capital at Wheathampstead.

The Belgae brought with them new innovations that did much to prepare us for the Roman way of life that was soon to follow. They introduced the heavy plough that revolutionized agriculture by enabling us to cultivate heavy valley soils, which had hitherto been useless. They introduced coinage, the lathe and the potter's wheel, all of which represented great steps forward. At the same time they encouraged trade with their brothers on the Continent; importing wine, fine pottery, bronze and silver wares and exporting such products as wheat, cattle, gold, hides, slaves and hunting dogs.

The Iron Age inhabitants of the Thames valley have proved to have been more than liberal in the way they scattered their treasures in the river, some of the objects being the finest of their kind ever discovered in Britain. But it would be unfair only to remember beautiful or unique objects

and to ignore all that are utilitarian or are paralleled elsewhere. As always, one has to be selective, and that is invariably difficult. But I have no second thoughts when picking out two pieces from the Layton Collection, neither of which is a work of art, although each is interesting and spectacular in its own way. The first is a tankard (Fig. 3) resembling a small, wooden bucket, built with staves held in

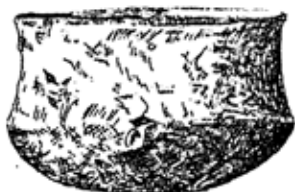


3. Iron Age wooden tankard with bronze handle and casing.
Layton Coll. ($\frac{5}{12}$)

place by three broad, bronze bands that entirely cover the wood. The handle is cast to form a pair of loops joined at the middle and attached to the tankard by flat, projecting terminals. The vessel is slightly larger at the base than the top, having a greater diameter of seven inches and a height of six. It is the sort of tankard that would gladden the heart of every beer-drinker, having a fine grip and an admirable capacity. It dates from the first century B.C., and, although it may look

a little sombre in a museum case, it has no doubt its own memories of many a riotous ancient British party.

The second outstanding piece from the Layton Collection is a bowl (Fig. 4) of thin bronze, nearly nine inches in diameter and originally possessing a pair of ring handles, neither of which has survived. At first glance it appears to be a bag-shaped vessel of no great attraction, but on closer examination one sees a small, circular hole in the bottom that has been sealed in antiquity by a plug and a washer. More than thirty such vessels of various sizes have been found in the British Isles, each with a similar small hole in the bottom. It was remembered that similar bowls were used in India, com-



4. Iron Age bronze bowl or "water-clock". *Layton Coll.*

paratively recently, to measure the passing of time, the vessel being floated in a tub of water until the water percolating through the hole caused it to sink. An attendant then banged a gong, recovered the bowl and started all over again. It has therefore been suggested that the prehistoric bowls served the same purpose; and in support of the theory

there came a discovery from Wotton in Surrey, where a group of similar bowls was unearthed, along with a "frying-pan" that could have been used as the gong. Mention may here be made of an impressive cauldron (Pl. I) in the British Museum collection, which is two feet one inch in diameter and is believed to have been found in the Thames. It is of Halstatt date and therefore earlier than the water-clocks, but it provides an excellent example of the way in which a single sheet of bronze may be beaten into the largest of vessels.

A suggestion which makes "water-clocks" more interesting is that they were connected with the Druids, who may have

brought the idea to Britain. The Druids have always had a curious fascination for the romantic antiquary, and although it is no longer believed that they built Stonehenge, the magic lingers on. Caesar has told us that the Druids were students of astronomy, geography and theology, and one cannot get far in astronomy without some method of measuring time—hence perhaps the water-clock.

We may also have to thank Druid influence for another type of river relic, the equally disputed currency bars. It is generally accepted that these long iron strips were the *taleae ferreae* mentioned by Caesar, and which were made to standard weights and possessed proportionate values. The Druid connection has been suggested by the fact that the bars have been found in widely differing parts of the country, and thus represent an inter-tribal custom which could have been developed only by a body with the religious authority of the Druids. The distribution spreads from the Thames, north to Leominster and Northampton, where iron was mined in pre-Roman times, and west to Gloucestershire, Somerset and Devon, these areas drawing their bars from mines in the Forest of Dean. Such are the facts, but whether Druidism had any bearing on them is a very different matter; indeed, some antiquaries have refused to accept the bars as currency at all, claiming that they are nothing more than unfinished swords. However, this is no place to enter into an argument of that sort. It is enough to recall that they are well represented in the Thames, having been found as far apart as Marlow, Datchet and Hammersmith, while a single example is said to have been thrown away after being found on the foreshore at Battersea.

Escaping from the web of uncertainty that envelops both water-clocks and currency bars, we return to the safer ground of swords, daggers and things military. Like those of the Bronze Age, Iron Age weapons are scattered indiscriminately up-river from London to Reading. Particularly

pleasing to the eye are the daggers whose sheaths are often adorned with ornamental chapes, and with applied or incised decoration that is often Oriental in character. The British Museum has a quite remarkable fourteen-inch dagger from the river at Cookham, complete with its bronze hilt and sheath (Pl. VI), which might easily be mistaken for an Indian or Near Eastern weapon. This particular dagger may not be a thing of beauty, but no one can deny that it has character. Both the British and London Museums can claim to possess



5. Iron Age dagger with sheath of bronze bands. From Mortlake. *Layton Coll.* (1/8)

other more pleasing, though simple, daggers and sheaths taken from the river at such places as Richmond, Hammersmith, Wandsworth and Westminster.

Most of the river's Iron Age "B" daggers are comparatively narrow-bladed, but two in the Layton Collection are very much wider, although attributed to the same period. The scabbards instead of being fashioned from a single sheet of bronze are of wood bound with a series of narrow bronze bands (Fig. 5). Unfortunately, like so many of the Layton relics, their place of discovery is not clear, one being labelled as coming from "Thames gravel at Mortlake", the other

having no provenance at all.

Swords of Iron Ages "B" and "C" taken from the river are not particularly common, and those that have been are rarely among the best of their kind. While the blades are of iron, the scabbards are of bronze, and, on occasions, may be elaborately decorated with chased designs or adorned with enamelled studs and panels. The examples from the Thames are invariably in scabbards with little ornamentation, and generally lack their hilts. While there is not a great deal that can profitably be said about these swords they cannot be

overlooked, for it was with weapons of this type that the Britons defied Caesar when his legions reached the Thames. The same warriors probably wore helmets similar to the one dredged up near Waterloo (Pl. X), a helmet which can claim to be one of the greatest Iron Age treasures that the river has given us. It is the only example of its kind and possibly the only truly pre-Roman helmet surviving in this country. The two crowning horns are probably the ancestors of the design that we associate centuries later with the Vikings. But here the treatment is typical of design in the first century B.C., the cap being decorated with embossed scroll-work and individual bosses scored to key a coating of red enamel. Such workmanship would only have been lavished on the helmet of a warrior of rank, and the same is true of two fine shield bosses which were found close together at Wandsworth. These, however, date rather earlier than the Waterloo helmet, but were the forerunners of the most famous Iron Age treasure ever found in the Thames—the incomparable Battersea shield.

Only two well-preserved shields of this period have ever been found, one at Battersea, the other in the river Witham in Lincolnshire. The Witham shield is the larger of the two and possibly a hundred and fifty years earlier in date, but it cannot match the Battersea shield for sheer beauty of decoration. The latter (Pl. VIII) represents Celtic art at its peak, for the artist knew exactly how far to go before he could be accused of over-ornamenting his work. Here is a flowing scroll motif that is strikingly beautiful in itself without detracting from the twenty-four enamelled studs that nestle within the embossed curls (Pl. IX). Each stud takes the form of a shallow dish, having a raised swastika pattern in the middle round which the red enamel was poured. The Battersea shield may be called the river's *pièce de résistance*, and not even the great bronze head of Hadrian from London Bridge or the well-known fifteenth-century reliquary from Wapping would presume to rival it. It is quite impossible to do the

shield justice in print, for there is only one sure way of appreciating its beauty—by going to the British Museum and seeing it for yourself.

Another shield in Early Iron Age style has found its way to the British Museum among objects from the Wellcome Collection. Its label, in faded ink, states that it was found in the Thames at Brentford in 18—, the last two figures not having been written. But although the decoration is partially in early British *La Tène* style, and the handle and studs for a carrying-strap are reminiscent of Late Bronze Age fittings, the shield is not considered a genuine antiquity.

It is still not possible to date either the Witham or the Battersea shields with accuracy, the former being attributed to the period 250–150 B.C., and the latter to the first century B.C. or even the beginning of the first century A.D. One is, of course, referring always to the date of manufacture, not to the time that the article was lost or thrown away. While pottery would have a comparatively short life, such things as helmets or shields would continue in use for very much longer. The Battersea shield might have seen service for two or three generations, and have changed hands in battle any number of times. In the same way, Roach Smith's Late Bronze Age buckler might still have been in use alongside the Battersea shield defending British warriors from Roman swords in 54 B.C., or even A.D. 43. It would be foolish to infer that this was necessarily so; but the fact remains that shields would have been too valuable to discard until they were no longer serviceable.

It was late in the summer of 55 B.C. that Julius Caesar made his first sortie into Britain, landing with a small force of only two legions, the Seventh and the Tenth, backed by little baggage and transported in inadequate ships. Although the expedition fell short of success, it served as a valuable rehearsal for the full-scale attack of the following year. In many ways the exploratory landing of 55 B.C. is comparable

with the Dieppe raid of 1942, entailing a landing on to an unknown shore and into the jaws of the waiting defenders. The object of the exercise was much the same, to test the defences before invading in force and to let the enemy know that one meant business.

After a series of delays the invasion fleet set sail from Boulogne at about 8 p.m. on an evening in August 54 B.C., and by noon the following day was lying off-shore, probably between Dover and Walmer, ready to pour five legions and two thousand cavalry on to the beaches. At first Caesar met with little opposition, the Britons having been scared by the size of the fleet. But as he drove inland resistance stiffened, and he met for the first time the military strategy of the great Cassivellaunus. After a series of running battles Caesar eventually reached the Thames, by which time, if he had not already done so, he had acquired a healthy respect for the British king.

When Caesar arrived at the river's edge he found a large force of Britons massed on the north bank, ranged behind a barrier of bristling wooden stakes, some of which projected from the bank while others had been driven into the river bed and lay hidden beneath the water. Having considered the situation on the basis of information extracted from prisoners, Caesar decided nevertheless to thrust on. He sent the cavalry across first, quickly followed by the infantry who managed to walk across although the water reached to their throats. Such determination had a disastrous effect on British morale, and after a comparatively ineffectual skirmish the defenders withdrew.

Caesar then pursued Cassivellaunus into Hertfordshire, where the latter's capital at Wheathampstead was captured with heavy British casualties and loss of livestock and prisoners. However, this was by no means the end of Cassivellaunus, who continued to harry the Romans whenever possible. But after engineering an unsuccessful attack on the

invaders' supply camp on the Kent coast and finding that lesser British tribes were submitting to Caesar, he too came to terms with the Romans. Caesar, worried by events in Gaul and realizing that he would have to abandon his British invasion, seems to have offered peace to Cassivellanus on reasonable terms so that the Roman army could return home theoretically victorious.

The important feature of Caesar's campaign, so far as we are concerned, is the problem of where he crossed the Thames. Numerous suggestions have been put forward, none of them particularly conclusive, and we are left to take our choice from any of the following sites: Halliford, Sunbury, Kingston, Petersham, Brentford, Chelsea or Westminster, for all of them have been championed at one time or another. Let us therefore examine the evidence.

Caesar himself wrote saying that the river could "be crossed at one place only on foot, and that with difficulty". But this statement need not be taken to mean anything more than that Caesar knew of but one ford. The only other fact mentioned was the presence of the defensive stakes in the water and on the bank, and this represents the one helpful clue. The "Venerable" Bede, writing nearly eight hundred years later, claimed that the stakes were then still in existence, although he thoughtlessly failed to mention their position. We know from excavations in the Thames silt that it is possible for timbers deposited in Roman times to survive intact, and on this score there is no reason why the Britons' stakes should not still exist today.

Halliford is the most westerly candidate and has often been claimed as Caesar's crossing point. In support we have the evidence of the ford known since Saxon times as the Cowey Stakes, and whose timbers existed until the eighteenth century. A number of finds have been made there, but most of them have proved to be of Saxon date, and the all-important timbers are also likely to be of that period.

Whereas they should have followed the line of the north bank, they did in fact run across the river in two rows some nine feet apart, having served, perhaps, as foundations for a bridge. A second and equally reasonable suggestion may be that they were intended to prevent cattle from being swept away by the water as they crossed the ford to an area of cow pasture beside the south bank.

A rather more likely crossing point exists near Brentford, and has been accepted by many authorities. Stakes were found there by the Thames Conservancy Board and stated to extend, off and on, for a distance of some two miles, from Isleworth to the mouth of the Brent tributary. It has been suggested in some quarters, however, that these may represent part of a comparatively recent bank revetment constructed during the eighteenth century. Excavations on the foreshore near the mouth of the Brent were carried out by the London Museum, and resulted in the discovery of part of a hut floored with wattles (Pl. XIX) not unlike those found at the Iron Age "B" lake-village at Glastonbury in Somerset.

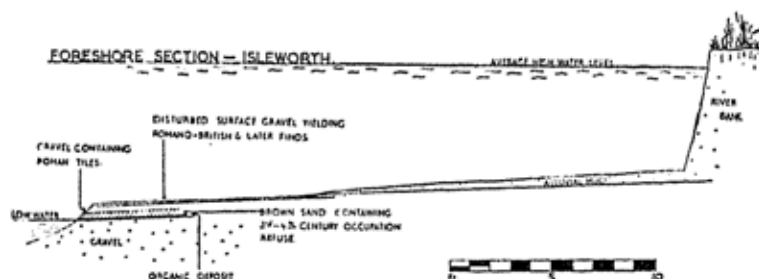
While *en route* to photograph the foreshore at Brentford the writer encountered part of another wattle floor farther up-stream towards Isleworth (Pl. XXI). The exposed remains were carefully reburied to protect them from the tide until such time as a careful examination could be made. The Port of London Authority was informed of the discovery, and it at once gave permission to excavate. At the same time Mr. W. F. Grimes, Director of the London Museum, agreed to take charge of any finds that might be made. The river was unfortunately less co-operative; as a result of heavy and prolonged rain it rose to flood level, and for more than two months refused to ebb sufficiently for work to begin. When at last the site was exposed it was found that much of the wood had been carried away by the tides. However, a sufficient quantity of wattles remained *in situ* to indicate that they had formed part of a light, circular platform—probably

the edge of a hut floor. Two fragments of pottery from the overlying gravel provided dating evidence suggesting that the floor had been laid during or prior to our earliest Iron Age phase.

While the work on the floor was still unfinished a passing pleasure-boat created a wave that swamped the delicate structure, destroying it before final measurements and photographs could be taken. Nevertheless it was gratifying to have obtained an unexpected record of the first structure of this date and shape to have been found in the river. Investigations between high and low water marks on the Isleworth shore as a result of this find later revealed traces of third-fourth century Romano-British occupation to east and west of the newly discovered structure. At a point between the Brentford and Isleworth huts a thick sand layer yielded fragments of Roman roofing tiles, stamped box flue-tiles, pieces of chopped wood, leather and a quantity of pottery. Sealed in an organic deposit beneath it was found a single fragment of Iron Age "A" pottery. Among the Roman sherds were found the remains of a colour-coated flanged bowl of the late third or early fourth century (Pl. XX) and part of a rare and impressive decorated bowl of the same fabric and date (Fig. 18). Similar colour-coated fragments were found upstream of the Isleworth hut floor, suggesting the presence of a considerable Romano-British settlement along the north bank of the river at this point. These examples of colour-coated pottery are particularly interesting, for a kiln producing similar wares has been discovered close to the river at Sandford in Oxfordshire; the inference being that the products were transported down the Thames towards London and offered for sale at the various river-side settlements.

When the report on the discovery of the Brentford hut was published in 1929 the pottery found there was attributed to the late second century. It is, however, possible that this dating was rather too early and that the structure may in

fact belong to the third century. What bearing, one might ask, have these late Roman finds on the problem of Julius Caesar and his river ford? In truth their significance is greater than might at first be imagined, for here we are confronted with the possibility of a ribbon of Romano-British dwellings stretching along the north bank from Brentford to Isleworth, all of which appear to lie near and below the modern low water mark. It is therefore reasonable to suggest that the many oak stakes so often claimed to be the defences of Cassivellaunus are in fact foundations or revetments associated either with the early Iron Age occupation or with the third-fourth century riverside settlements.



6. Section through Isleworth-Brentford foreshore.

Sir Mortimer Wheeler, who conducted the 1928 excavations, stated that the evidence indicated that the river level must have been fifteen or more feet lower in Roman times in relation to the existing land surface. The Isleworth finds of 1955 naturally support this view, as is shown by the illustrated section through the foreshore (Fig. 6). This dramatic change in level is, of course, less disturbing if we can accept the belief that the tide which now flows up-stream to Teddington only reached to Londinium at the time of the Roman occupation.

It has recently been suggested that it may be possible to

locate the point at which Caesar crossed the Thames by means of practical experiments in fording the modern river on foot. Romantic though the idea may seem, it could hardly serve any useful purpose, for as we have already established the modern course bears little resemblance to the river that the Romans crossed in 54 B.C. Nevertheless there is little doubt that the Thames could then have been forded at various points between Brentford and Isleworth. Furthermore the presence of late Roman dwellings and the probable existence of an Iron Age "A" settlement on the same site suggest that future excavations may reveal a continuance of occupation. A riverside settlement here in 54 B.C. would inevitably have betrayed the presence of a ford, just as the overland tracks would have led Caesar's army to the village. Conjecture of this kind seems, on the whole, to be more stimulating than a blind acceptance of the disputed oak stakes.

Two further sites remain as possible points at which Caesar may have crossed the Thames, and these are at Chelsea and Westminster. From a geographical standpoint, either would provide a reasonable route, but the archaeological evidence at Chelsea is the more interesting, although not necessarily more conclusive. During the building of Chelsea Bridge in 1854 workmen recovered a quantity of relics which were thought to represent the *débris* from a battle between Britons and the Romans. The finds were said to have first appeared near the middle of the stream and to have become more numerous towards the Middlesex shore, suggesting that an attack was launched from the south and that it ran into trouble as it approached the north shore. The Roman versus Briton theory was supported by the presence of a number of iron spear-heads of Roman type, a considerable collection of human skulls then stated to be of Roman and British shapes, the sole of an allegedly Roman military boot and various other assorted objects. The two distinct skull

types must be taken with a large grain of salt, for an identification of that kind is far from convincing. An account of the boot-sole which was published in the *Journal of the British Archaeological Association* in 1858 shows it as being quite unlike the majority of Roman soles from the London area. However, this fact cannot be used in evidence, for an invading Roman sole of 54 B.C. need not have been made in the same way as those produced by Romano-British cobblers a century later. Rather more disturbing were the remaining finds, among which were an Iron Age loom-weight, a fragment of a bronze cauldron, a Middle Bronze Age riveted dagger and at least two leaf-shaped bronze swords which should belong to the Late Bronze Age or at best to our first Iron Age era. None of these things would appear to have any bearing on a battle between Britons and Romans. However, the presence of the skulls indicates an encounter at some time, but the exact date and the nature of the contestants are still anyone's guess. We can only hope that at some future date further evidence will turn up to throw light on what the Victorians so earnestly described as "this Celtic Golgotha". Unfortunately the chances of ever sorting the problem out are less than hopeful, for it is a well-known fact that the river at this point has been littered with relics of every conceivable period from Palaeolithic flints, Bronze Age palstaves, and the Battersea shield to Saxon and Viking swords and German pottery of the seventeenth century. They would appear to be hopelessly mixed and archaeologically quite useless.

Having but briefly traced the chronology of the river's antiquities from the Ice Age to the first century A.D. in these few pages, scores of interesting and important objects have of necessity been omitted. Much would inevitably have been repetition and so can have no place in a book which does not claim to be a catalogue. However, I have intentionally left one class of object severely alone, for the good

reason that the examples stem from various periods, yet must all be discussed together.

The most obvious relics that we could expect to find in a river are the remains of boats that floated on it, and the Thames in this respect is never disappointing. We are, of course, dealing now only with prehistoric boats, and these are confined to canoes of one sort or another. The earliest known canoe from Britain was discovered in Scotland on the bank of the Tay and belonged to the Mesolithic or Middle Stone Age, thus being about ten thousand years old. The Thames cannot, unfortunately, compete with this record, but it can perhaps lay claim to the oldest boat in England, which was found amid the Erith Marshes and was dated to the Neolithic era by the discovery inside it of a scraper and a polished flint axe. Only rarely are such convenient aids to dating available, and as dug-out canoes tend to be somewhat characterless they are often extraordinarily difficult to classify. The largest was found at Marlow and was no less than twenty-five feet in length, but there was nothing with it to help in the dating. Another found during the building of the Albert Dock, and now in the British Museum, was seventeen feet long and lay in a silted channel on whose bank were discovered fragments of Roman pottery. A boat fashioned from "a solid block of oak" was found at Shepperton as long ago as 1812, while another was discovered in 1877 by a boatman at Hampton Court. Yet another associated with Roman material was found in the Lea tributary near Walthamstow, two more at West Molesley and Strand-on-the-Green, and no less than three together on the fore-shore at Isleworth.

The Isleworth canoes were excavated by workmen from the Port of London Authority and were watched by G. F. Lawrence on behalf of the London Museum. Unfortunately, owing to "various unhappy circumstances", two of the craft were badly smashed and Lawrence later reported that "the

fragments were hopelessly mixed up when they were landed at Strand-on-the-Green". The remaining example is now in the London Museum.

Most of the antiquities already mentioned have been found during dredging operations, or by labourers building boathouses and revetments or cutting drainage channels. It would be fair to say that such activities have accounted for the discovery of ninety per cent of the river's prehistoric treasures. But the remaining ten per cent have been found on the most unlikely occasions by the most ordinary people. There was the case of the small boy bathing at Brentford Ferry who dived into the river and came up clutching an Iron Age dagger-blade. Then there was the boatman at Chiswick who was about to moor his craft in a backwater when he saw something gleaming beneath the surface of the water. He reached down for what he hoped would be gold and recovered a fine, Bronze Age, socketed axe-head. The thought of finding a dagger or an axe-head is always exciting, but there are too many for them to be really important. But one chance discovery did have the most dramatic possibilities, and strangely enough it was not of metal but of simple, black pottery (Pl. V).

While working on the Surrey foreshore between Hammer-smith and Putney Bridge, two dredgermen noticed a dark object protruding from a groove in the gravel left by the keel of a beached pleasure boat. One of the men who happened to have a vague interest in antiquities carefully dug round the find and extracted a small black pottery cup whose most outstanding feature was a pair of large, looped handles. It was quite unlike anything ever made in this country. The cup, which can best be described as a stemless *cantharos*, passed into the hands of G. F. Lawrence, and thence into the collection of Toronto Museum, finally returning to the British Museum, where it remains among the most interesting finds ever recovered from the river.

The cup was not made in Britain but is, in fact, of Trojan or Italic origin. Unfortunately it is not yet possible to decide which of the two can claim to be its correct provenance. But if it hails from the neighbourhood of Troy, the vessel must have been made between 1000 and 700 B.C.; and if from Italy, a date between 700 and 600 B.C. would seem reasonable. In either case we might think that the cup had no right to be found in Britain. However, the British Museum suggested in 1921 that it was likely to be Trojan and that it may have been brought here by Phrygian traders who sailed up the Thames selling their cargoes to the inhabitants of riverside settlements. Today this theory lacks supporters; but if the cup should be Italic, it might well be a relic of Phoenician trade, or perhaps a personal possession brought here by one of our early Halstatt settlers. On the other hand, it can be argued that it came to Britain quite recently as a traveller's souvenir. But if the cup is of Trojan origin, we can assume that it was either deposited in antiquity or has found its way into the river within the last seventy years or so, for Trojan pottery was not available prior to the excavations of Heinrich Schliemann in the latter half of the nineteenth century. This would rule out the suggestion that the find is merely a relic of the Grand Tour brought home during the eighteenth century. But if, as is now suggested, it was made in Italy, that theory cannot be ignored.

If we are to suppose that the cup was brought home by a traveller, we must also assume that he lived near Barn Elms where the vessel was found, and that he took it down to the river and threw it into the water—altogether a most improbable action. The original report of the discovery recalls that the cup was found in gravel and that it was only exposed by a disturbance caused by a pleasure boat being drawn up the shore. It therefore follows that the fragile object had buried itself in the hard gravel without damage to its surface or handles, and that it lay so well protected that

the weight of a boat could pass over it without any ill effects. One might be forgiven for wondering whether these lucky escapes are not too good to be true. But if they are not true, then it naturally implies that the whole story of the discovery was no more than a monstrous fabrication. It is just possible that the men acquired the cup from another source, perhaps a dealer or a tourist, and sold it to G. F. Lawrence claiming that they had found it under the circumstances already related.

There is, however, some evidence in favour of the cup being a genuine Thames antiquity. In the first place, had it been lost into the river more than two thousand years ago there is every likelihood that the gravel would have consolidated round it to provide perfect protection; and secondly, the Barn Elms find is not the only pre-Roman Mediterranean relic to have been discovered in the river. (Chapter III, p.54, and Chapter X, p. 240.)

One naturally hopes that it is possible to take the story of the "Trojan" cup at its face value, and, if so, we must recall with gratitude the care that the finders took when uncovering it. Unhappily many river treasures have been found by people who have little understanding or appreciation for such things with the result that they have been damaged or totally destroyed. The sad story of an Iron Age dagger now in the British Museum will serve as an illustration.

A man walking along the foreshore between Wandsworth Bridge and the mouth of the river Wandle noticed the dagger shining in the mud. Having washed the dirt from his discovery he endeavoured to draw the rusted blade from its bronze sheath, but meeting with no success, he continued to pull until the hilt came away in his hand. This he threw back into the river. The blade and sheath eventually found their way to the British Museum; but the loss of the hilt was particularly distressing, for it had been the first complete

example ever found in the Thames. It would be a simple matter to sit back and persuade ourselves that this tragedy occurred fifty years ago, and that modern education has ensured that everyone has now learnt to appreciate the importance of antiquities. But we would be deluding ourselves—such things still happen all too frequently.

Rome and the River

FOR many people the age of the Romans holds a fascination unequalled by any other period in our history. Yet it is hard to tell why this should be so, for they can have learnt little about Roman Britain from their history books. We have few documents, no diaries or eye-witness accounts, and little of the documentary background that helps to bring later centuries so vividly to life. Our knowledge of Rome in England relies largely on inaccurate historians, a number of battered inscriptions and—on thousands upon thousands of chipped potsherds. But be that as it may, the fact remains that the antiquarian interest of many people begins and ends with the Romans. The vaguely interested passer-by who stops to look at an excavation assumes, without asking, that one is digging for what he is pleased to call "Roman remains", or what the sceptical British workman knows as "a bit of the old Roman". Any attempt to explain that the archaeologists are examining something as recent as an eighteenth-century cesspit would evoke incredulity, so steeped is the layman in his belief that antiquaries search only for Roman relics.

As far as the history of London is concerned, interest in the Romans is certainly not misplaced, for their arrival marked the beginning of the city, and with it the beginning of the river's claim to be the most famous waterway in the world. It is hard for us to realize that without the river London might never have existed. Without it the City's two

hills might differ little from a thousand and one tree-covered but uninhabited prominences. Had there been no Thames, history might have shaped itself very differently.

But the river *was* there, with its wide and hungry mouth waiting to draw into it all the shipping of the world. Perhaps as long ago as seven or eight hundred B.C. the galleys of Phoenician traders found their way into the estuary, at first to seek shelter from North Sea gales, and then in search of landing places where trade could be opened with the inhabitants. But the would-be salesmen must soon have



(4)

7. Miniature Greek hydria. From Barking Creek. Guildhall Mus.

discovered that although the river's mouth provided shelter, it had little else to offer. The banks were not bordered by green pastures, as they appeared from a distance, but by mile upon mile of treacherous and inhospitable marshland, inhabited only by otters, wildfowl and small groups of Britons living in isolated clusters of wattle huts.

It is unlikely that the various prehistoric peoples who settled in Britain made their way by ship up the Thames, but rather that they came overland and merely settled beside the river. But as we saw in the preceding chapter, there is some evidence that there may have been a little trade with the Mediterranean from the end of our Bronze Age onwards. The Trojan or Italic cup from Barn Elms, a Greek *rhylon* of the second century B.C. discovered on the site of Billingsgate Market, and a model *hydria* or water pitcher of the sixth century B.C. (Fig. 7) found at a depth of fifteen feet and six hundred yards east of Barking Creek, may all have reached our shores before the Roman invasion. It is therefore reasonable to suppose that continental traders took their ships up-

river to do business with the Thames-side communities. But it is unlikely that the market was sufficiently profitable to warrant regular shipments of goods from the Mediterranean countries. Not until the first century B.C. do we find much sign of organized trade across the Channel and North Sea. But once the Belgae became established in the south-east of Britain business began to boom, and more and more trading vessels must have made their way up the Thames. However,



8.

it was not enough merely to sell to the small villages along the river, for the principal markets lay away from the Thames on the routes to such places as the great settlement at Prae Wood, near St. Albans, or to the pre-Roman Silchester. Dotted through Middlesex and Hertfordshire were numerous small though often rich settlements all ready and waiting for foreign commercial travellers. If these markets were to be exploited to the full, a trading settlement would need to be established beside the river so that imports could be

landed and stored before being carried inland. The first passable site for such a settlement lay on two small gravel hills on the north bank of the river (Fig. 8) faced by another patch of rising ground on the south shore. We now know them as Ludgate Hill, Cornhill and Southwark.

The hills, it is true, were of no great height and were divided by a stream and a ribbon of marsh. To the east lay a belt of marshland, to the north lightly wooded country backed by deep oak forests, and to the west the Fleet river, beyond which lay woods and another patch of marshland. The early settlers would have been hard put to it to imagine their hills as the site of one of the world's greatest cities, but the ground was dry and the river opened into a basin that provided an excellent anchorage. This, then, represents a possible explanation for the origin of London; but I hasten to add that it is not supported by archaeological evidence.

Until traces of a pre-conquest settlement are discovered beneath the ruins of Roman London, we must assume that London was not founded until some time shortly after the Claudian invasion of A.D. 43. However, the fact that no one has yet found an early settlement does not necessarily mean that it never existed. It is simply not proven. On the other hand, if a settlement *did* exist it does not automatically follow that it was founded by traders sailing up the river as suggested here. The first settlers could have made their way overland and have bridged the river between Cornhill and Southwark, so as to provide an easy route into Middlesex. In this case it would be reasonable to expect a bridgehead settlement quickly to spring up. It so happens that there is a single sliver of evidence to suggest that a bridge did, in fact, exist prior to the invasion of A.D. 43.

As so much hinges on the Claudian invasion it seems reasonable to digress for a moment to look at the events that preceded the arrival of the Roman emperor on the bank of the Thames. We have already seen that Julius Caesar's cam-

paigns in Britain were by no means unopposed, and the new commander, Aulus Plautius, was very well aware of the pitfalls that awaited him. Caesar's account of the expeditions was in fact used as a text-book by the new general staff. Three years earlier, the mad emperor Caligula had planned to invade Britain, but after bringing his army to the very shore of the channel he had abandoned the whole plan. The army was lined up on the beach and ordered to gather sea-shells as "spoils from the ocean due to the Capital Palatine". A lighthouse was built at Boulogne as a monument to the victory, and each soldier was promised a fatuous gratuity of a hundred denarii and told: "Go your way happy, go your way rich!" No doubt the Britons found all this highly amusing, and although initially disturbed by the revival of Roman interest in their island they were now lulled into a slumber of misguided complacency. Claudius, who became emperor after the murder of Caligula, no doubt saw the whole mortifying affair as a slur on the prestige of Rome, and this may have been one of the factors that prompted him to turn his attention to the Britons so soon after his accession.

Britain was by no means an island isolated from the rest of the world, and the Belgae would have had warning of an impending attack well in advance. But remembering Caesar and Caligula, there may have seemed little cause for undue alarm. Such an attitude must have been considerably bolstered when the Roman army reached the Channel and firmly refused to cross it. A widespread mutiny ensued in which the soldiers announced that they had no intention of risking their necks outside the known world. Claudius, who was still in Rome, sent his chief secretary, Narcissus, to quell the mutiny. But on his arrival the soldiery was in no mood to listen to the effeminate ranting of a freed slave, and he was greeted at first by hostility and abuse. However, the emperor's message was eventually delivered and order

restored. But here in Britain there must have been many a knowing wink, and jokes made about sea-shells and soldiers with wet feet. All this had a bearing on what was to follow.

One tends to talk glibly about the Britons as though they were a single national unit, but this was far from the case. It is true that under the wise and powerful rule of Cunobelinus (perhaps the great-grandson of Cassivellaunus), the south-east of Britain had become, more or less, a single kingdom with Camulodunum, near Colchester, as its capital. But after his death this unity was lost, and when the Roman invasion began the tribes were divided against each other. Togodumnus and Caratacus, the sons of Cunobelinus, raised independent armies and hurried south to meet the attack, while the inhabitants of Kent, used to government from afar, either waited for instructions that came too late or decided that discretion was the better part of valour and took shelter in the marshes and forests. Caratacus was the first to reach Kent, but was either unready or unwilling to oppose the consolidation of the Roman foothold at Richborough. Instead, he chose his own battleground and waited for something to happen. Unfortunately the results of this manoeuvre were not what he had hoped, and his forces proved to be no match for the well-trained Romans, whose total strength must have numbered something in the region of 40,000 men. Caratacus and the remnants of his army retreated northwards, hotly pursued by General Plautius, who eventually ran into Togodumnus and his force. The latter was quickly routed, and the two brothers continued the withdrawal together as far as the north bank of the Medway, where they again rallied to meet the inevitable onslaught. But, expecting a frontal attack across the river ford at Rochester, they were not prepared for an outflanking movement by the 2nd Legion under its commander, the future emperor Vespasian. The attack caught the Britons from behind while they were in the midst of a frontal assault by contingents of Gallic

cavalry. But the battle was not yet over, and when dusk fell the Britons were still in command of the ridge overlooking the Medway. But on the following day, after savage hand-to-hand fighting, the Britons were forced to give way, eventually abandoning their positions and withdrawing in the direction of Dartford. The victory at the Medway marked the end of any substantial resistance in the south-east; but had the Romans lost the battle, history might well have taken a very different turn.

At this point the evidence becomes hopelessly confused, for we have to rely on historians whose accounts differ in relating the story of the invasion when Plautius reached the Thames. Suetonius, writing in the second century, stated that the river was not defended, while Cassius Dio, writing nearly a hundred years later, claimed that a battle took place. It is impossible to say which story is correct, although it does seem that the Britons would have been foolish to have missed the chance of holding one of the last natural obstacles that barred the route to their capital at Camulodunum. Dio's account of the crossing reads as follows:

"... the Britons now fell back on the river Thames at a point near where it flows into the sea and at high tide forms a lake. This they crossed without difficulty, since they knew where the firm ground and the fords were; the Romans pressing after them were once more brought to a halt. However, the Gauls swam across again (as they had done at the Medway) and some others got over by a bridge a little farther up-stream, and so the Britons were attacked from several sides at once and many of them were killed. But in pursuing the fugitives the Roman attacking force was rather incautious and became involved in impenetrable swamps in which a large number of men were lost."

If this account is correct, and we must remember that it

was written long after the event, it poses some interesting problems. The reference to the point where the river formed a lake could be taken as a description of the present Pool of London, and the mention of a bridge could indicate the presence of a pre-Roman London Bridge. On the other hand, the bridge could equally well have been a temporary structure thrown over by military engineers. But if in fact there was a pre-invasion bridge, then, as mentioned earlier, there is every likelihood that there was also a bridgehead settlement.

Dio goes on to say that, having established himself on the north bank of the river, Plautius called a halt and settled down to await the arrival of the emperor. This was following a prearranged plan, but as a piece of military strategy it should have had little to commend it. However, as it turned out, the Britons made but poor use of the respite. On receiving news of his commander's successes Claudius set out for Britain, travelling by sea to Marseilles, then crossing overland to Boulogne, and from thence presumably to Richborough. He brought with him reinforcements that included elephants and contingents from his personal troops, the *élite* praetorian guard; and with this show of gilded force he marched north to meet Plautius on the bank of the Thames. Here again we find ourselves in confusion, for even Dio now contradicts himself. Having said that Plautius had fought a battle north of the river, he then states that Claudius "joined the legions which were waiting for him on the Thames. With these he crossed the river, engaged and defeated the British army which had collected to resist his advance, and captured Camulodunum . . ." If Claudius crossed the Thames *with* the legions, they must either have never crossed the river or have withdrawn to the Surrey shore to meet the emperor. The latter is perhaps the more probable, thus enabling Claudius to emulate Caesar and cross the Thames with his army. In that case we are confronted with the extraordinary situation of the emperor

leading his forces across the river, with trumpets, cavalry and elephants in full pomp, knowing very well that the north bank had already been cleared of the enemy that he was supposed to be attacking.

The course of events that followed the crossing of the Thames do not concern us. It is enough to recall that Claudius took Camulodunum without any great effort, personally accepted the surrender of its inhabitants and returned to Rome to enjoy the customary triumph. Camulodunum remained the provisional capital, and in some views London was still no more than two hills scarred by the passing of an army. But whether this was or was not the case, it was a state that was not to last, for very soon buildings were springing up and the story of the City had begun.

The river has yielded surprisingly few clues relating to the years of the Roman occupation, except in the area of London Bridge, where numerous coins and other antiquities have been recovered. These, however, are bound in with the story of the bridge, and so must await their turn. Although many isolated items have come to light from various stretches of the river, few give any indication of how they came to be there. It does not follow that they are not individually of interest, but merely that they can tell us little of their own story, and less still of the river or of London. But when discussing the Thames it is only fair to include the tributaries that feed it, and none can have had more bearing on the story of early London than the Walbrook, which flowed between the two hills. Its dried and silted valley is today the City's treasure-house of Roman antiquities.

The part that the tributary played in the Roman era is hard to assess, for like the origins of London itself it is surrounded by a mass of conflicting theories. The most popular and long-lived of these was the assumption that the Walbrook was tidal at the mouth and wide enough for the galleys of Imperial Rome to moor along quays that reached

to the very heart of Londinium. In step with this theory, most of the plans and reconstructions of Roman London show the course of the Walbrook as one of its salient features. Again, following the same line of thought, the suggestion has been made that the earliest settlement was not at the bridgehead but was situated on the east bank of the Walbrook, as a result of the latter's importance as a harbour.

The Walbrook was assumed to rise in a series of streams north of the City which flowed into a single channel near the Bank, and then ran beneath the modern Walbrook street, down Dowgate Hill and into the Thames a little to the west of Cannon Street Railway Bridge. The evidence in favour of a Walbrook up which ships could sail as far as the site of the Bank of England rests largely on two discoveries. While laying a sewer in Cloak Lane near Cannon Street Station a bed of silt, thought to represent the dried bed of the river, was found to be 248 feet in width. The second discovery, which aroused much greater popular interest, was uncovered in 1871 in Queen Victoria Street, close by the Mansion House. Workmen digging in the Walbrook silt exposed what was thought to be an ancient barge loaded with a cargo of calcined grain, a find that was at once seized upon as proof positive that the Walbrook was once navigable as far up-stream as the Mansion House. Both discoveries were made by men unskilled in the interpretation of archaeological evidence, and today both are suspect. We have to ask whether the observer who measured the Walbrook at Cloak Lane was really measuring a river bed or merely the silt of a marshy valley. Again one must ask, was it really a barge that was found in Queen Victoria Street or was it just another of the many timber structures that so frequently come to light in the Walbrook area? You might wonder whether anyone could be foolish enough to think he could see a boat which did not in fact exist. Only a boat, surely, could look like a boat? It seems a valid enough argument.

But experience has shown that it is more easy to see non-existent boats than one might think.

In 1952 the writer was invited to examine a newly discovered "boat" on a site in Limehouse, but on arrival it turned out that the exposed section of the vessel had already been excavated and thrown away. However, it was explained that in a few days further digging would uncover another section of the boat which could then be carefully examined. In the meantime the workmen were able to give a detailed description of the way in which the planking had lain in relation to the stanchions. There was no doubt in their minds that they had found a boat, and all they wanted to know was how long it had been in the ground. After much discussion we discovered that no evidence of nailing had been found and that the planking had fallen apart very easily. On the existing evidence it was extremely unlikely that the boat could have been more than about two hundred years old, and in so short a time, and under the prevailing conditions, it seemed extremely unlikely that iron or copper nails could have decayed so far as to leave no trace. When the next section of the "boat" was eventually exposed our suspicions were confirmed, for the timbers turned out to be nothing more than a revetment. At first glance it did resemble part of a clinker-built vessel, and so provided the valuable object lesson that it is possible to see a boat that does not exist. More recently, in 1954, a rather similar boat-shaped structure came to light actually in the Walbrook silt. This dated from the second century A.D., and although having vertical posts backed by overlapping planks it too was merely a revetment to hold back the sides of a pit.

It now seemed significant that the Queen Victoria Street find had not been described as a ship, a galley or even a rowing-boat, but as a *barge*—and barges are frequently straight-sided and blunt-ended. They are not, however, the only timber constructions that are so shaped. A rubbish or

storage pit, with sides supported by posts and planking, when seen from the outside after the removal of the soil into which it was cut, could resemble a large wooden box or even a barge. But supposing that this was the true answer, we are still left with the cargo of calcined grain. It is hard to imagine how that too could have been a figment of the finder's imagination. A possible, though unlikely, explanation might be that a grain store was built by cutting a pit into the Walbrook silt. But against such a theory we can argue with perfect justification that grain is always stored in the driest place available, and that the Walbrook valley represents the wettest in the whole of Roman London. There the problem rests.

Since the war, building and archaeological excavations in the valley have yielded much new evidence, not all of it very conclusive. In 1949 a large office block was erected on the east of the Walbrook street, and as expected a thick bed of the well-known silt soon appeared. It stretched back from the road in an irregular sweep and varied from ten to three feet in thickness beneath the existing basements. As the workmen dug through it, hundreds of Roman potsherds, bones, pieces of glass and even jewellery were found. The black silt, made up largely from compressed vegetable matter, could be broken apart to reveal leaves and grasses that had died nearly two thousand years ago yet still retained their colours. A lump thrown up by a workman contained the skeleton of a small bird, some of whose feathers still clung to its peat-like coffin. Many visitors enthuse wildly over a fragment of bronze that emerges from the silt shining like gold, yet to my mind the discovery of a green leaf or a small perfectly preserved beetle can be a thousand times more impressive. In our own gardens we know how leaves that fall in the autumn have vanished by the spring, and yet here in the silt they can survive for thousands of years.

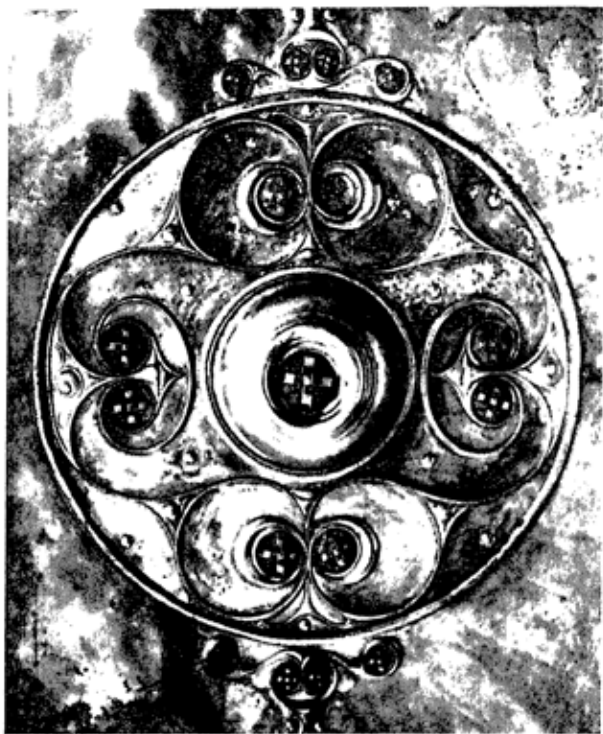
The silt exposed in 1949 would probably have been ac-



VII. Late Bronze Age shields, the lower example possibly from London Bridge. *Brit. Mus.*



VIII. Iron Age bronze shield richly embossed and adorned with red enamelled studs. Found at Battersea. *Brit. Mus.*



IX. Detail from central disc of the Battersea shield.
Brit. Mus.

X. Horned bronze helmet. From Waterloo Bridge. First century
B.C. *Brit. Mus.*



cepted as part of the Walbrook river, had it not been for the disturbing fact that it was overlaid by the foundations of Roman buildings that were proved to have been erected in the second century. These stood on timber rafts that rested on piles driven deep into the silt—an indication that the ground must still have been very wet when building began. No Sherlock Holmes was needed to explain that a Walbrook which continued to flow throughout the Middle Ages could not possibly have been built over in the second century. Therefore it was assumed that the silt could only represent the flood plain of the Walbrook, and that the main stream would lie either beneath the road or to the west of it. At a point directly beside the modern road a series of wooden piles was uncovered and thought to be part of the revetment of the eastern bank, while a large block of squared stone found nearby was quickly hailed by the press as a bollard to which the Roman ships moored while unloading at the Walbrook wharves. One of the timbers was later submitted to an expert in dendrochronology (dating by tree-ring growth) who found that it had been cut in about A.D. 70 and so dated the driving of the piles.

The results of these observations were received with general satisfaction and largely without argument. But when a detailed archaeological excavation began on a blitzed site to the west of the road, this whole conception of the Walbrook and its significance collapsed like a punctured tyre. Everything that had been "proved" on the opposite side of the road was shown up in an entirely new light, and there was every chance that the so-called Walbrook revetment had been no more a river wall than the barge had been a barge.

Before discussing the later excavations any further, it is relevant to recall three remarkable discoveries that were reputed to have been found in or near the Walbrook in 1889. A celebrated Victorian collector, William Ransom, was in the habit of visiting the shop of an East End dealer who

specialized in buying, often quite illegally, antiquities that were dug up in London. On one of his visits Ransom was shown three pieces of Roman sculptured stone, all of which were said to have been found in the Walbrook at a depth of about 20 feet. The first was a headless statue of the deity Bonus Eventus, with the prow of a ship at its feet, the second the head and upper body of a marble river god (Pl. XXIII), and the third a sculptured stone showing the Persian god Mithras slaying the sacrificial bull. Ransom purchased the three pieces and set out to try to locate their finder; but although he failed in this, he did learn that a new sewer had recently been laid in Walbrook near Bond Court, and it seemed likely that the finds came from this source. The fact that all three objects were of foreign stone made some people wonder whether they had really been found in London at all, while others accepted them and even speculated as to whether at some future date a Mithraeum might be found on the bank of the Walbrook. Subsequent investigations have shown that the latter view was correct. Indeed it is now believed that the sculptures were actually found within the temple walls.

Soon after scientific excavations began in 1953 archaeologists of the Roman and Mediaeval London Excavation Council uncovered the curved west end of a substantial Roman building which was later to be identified as a temple. Eventually these tumbled walls were to become the archaeological sensation of 1954, a find which in terms of "news value" rivalled any of the major discoveries of the century. From Land's End to John o' Groats newspaper readers were kept constantly informed of developments at London's Temple of Mithras, and as the excavations reached their climax the public queued by the thousand to see they knew not what. But that is another story.

The discovery of the temple served to overshadow the main purpose of the excavation, which was to determine once and for all the true width of the Walbrook. The presence of

the temple which had been built in the second century ruled out any possibility of the river lying directly to the west of the road, and made it extremely unlikely that the bed lay under it as suggested in 1949. It therefore followed that the Walbrook could only have run through a course beyond the temple to the west. Eventually the excavators came to a point where the black silt dipped into a gully lined with water-born sand, and this, it was thought, represented the bed of the Walbrook in the second century A.D. But instead of being more than 200 feet wide it measured barely twelve.

When the builders began mechanical excavation on the site a sixty-foot stretch of the gully was exposed. It had an average width of eight to twelve feet, and its sides were revetted with vertical piles and intermittent horizontal boards. The bed cut down to the natural clay and contained a filling, two feet in thickness, of water-carried gravel. In places the banks had been eroded to form gravel-filled pockets behind the timbering. In the gravel and from a layer of sandy silt over it were found many fragments of pottery, the latest of which could be dated to the second half of the second century. From the gravel came a number of remarkable finds, for it appeared that a metal-worker's shop had stood near by and that its staff had thrown quantities of scrap metal and unfinished or marred products into the water. Among the magnificently preserved finds were literally thousands of iron nails, chains, tools, hooks, knives and household fittings along with innumerable coins, bronze needles, decorative pins, finger-rings, brooches, ornamental box and leather mountings, hinges, studs and a host of other odds and ends. A single day's excavating resulted in the recovery of half a hundredweight of Roman metalwork. While this was all very exciting, of more importance was the evidence obtained that related to the stream itself. It seems likely that when the city wall was built in the second century, the water was directed through a culvert into a narrow

revetted channel cut through the accumulated silt, and that this ran through the centre of Londinium and out into the Thames to the west of Dowgate. Where then was the great channel that carried the ships of Rome into the heart of London? The sad answer was that it never existed. The Walbrook had been no more than a stream, or series of streams, that ran down between the hills meandering at will through the marshy valley. So died a romantic theory that had developed almost into a legend.

While it is simple enough to dismiss the matter as an unfortunate archaeological blunder, a number of very pertinent questions remain to be answered. Why, for example, does Romano-British pottery that can be dated fairly late in the first century lie on the clay beneath the silt? How did some fifteen feet of silt pile up during the four centuries of Roman occupation? And what has become of the Walbrook that we know existed during the Middle Ages? The theory that a pre-Roman settlement grew up on the east bank of the Walbrook as a result of its importance as a harbour is now clearly discredited. Therefore we must look for our pre-conquest London elsewhere, perhaps near London Bridge. But even if the Walbrook river can no longer be a salient feature in our picture of Roman London, the marsh-filled valley is still very much in evidence. Here again is another problem. The excavations have shown time and again that the valley was built on from fairly early in London's history, so early, in fact, that buildings sprang up there before they began to be built on the drier and generally more desirable Ludgate Hill. What then was the attraction of the Walbrook?

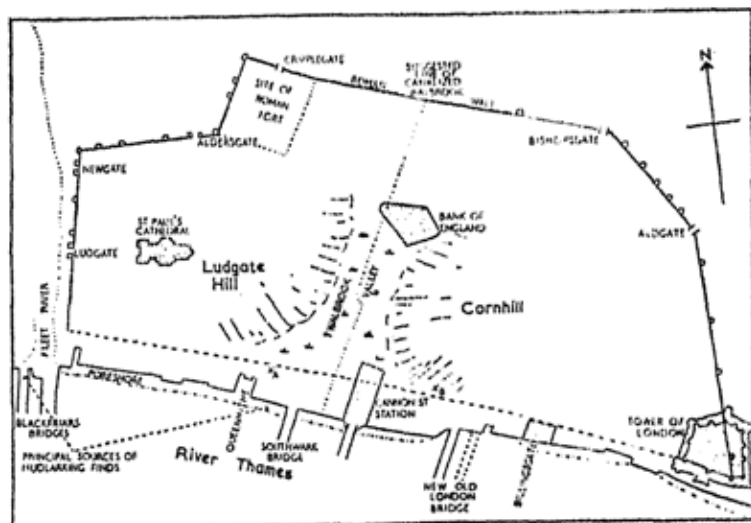
One of the most consistent features of any excavation that cuts across the Walbrook silt is the discovery of great quantities of leather. While shoes, sandals, boots and pieces of clothing are represented, the largest number of pieces are trimmings and waste hide. This indicates that the valley housed London's tanneries, a highly important industry

when not only footwear but shirts, cloaks, tents, and even undergarments were made of leather. The silt has also yielded evidence of other crafts, carpentry, the making of bone knife handles, and perhaps even the production of glass, although the evidence for the latter is somewhat weak.

As the Walbrook can no longer claim to have been the harbour of Roman London, some other site must be found for the wharves and warehouses that are part and parcel of any substantial port. They were certainly not along the bank of the Fleet, for that lay outside the city, even when it had grown to its fullest extent. There remains only the frontage of the Thames itself, and that must, therefore, be the answer. There is, however, evidence of a southern city wall running from the Tower of London to a point near Blackfriars' Bridge; but as yet we have no way of knowing whether it was continuous along the entire distance. Most of the old reconstructions show a gate at the head of London Bridge and a wide opening at the mouth of the Walbrook, but if quays and wharves lined the river frontage there must certainly have been other entrances.

The remains of the Roman wall can still be seen at its eastern end within the Tower of London to the south-east of the White Tower, and it has been suggested that the wall turned west along the line of the present inner Tower wall (Fig. 9). This is a theory based on the assumption that the Roman bastions would have occupied the same positions as the existing Lanthorn, Wakefield and Bell Towers and that these may, therefore, have been built on Roman foundations. If this were the only evidence for a southern Roman wall we might be tempted to ignore it, but building excavations close to the river have uncovered various short lengths of a substantial Roman wall, as much as ten feet in thickness, which, when drawn on a plan, does follow the expected line. Running as it does along Thames Street, the wall indicates either that the river was much wider at this point in Roman times or that the

defences lay at some distance from the river's edge. On the face of existing evidence the latter possibility seems the more likely. Excavations on the foreshores at points above and below London have shown that in the first and second centuries, at least, the high tide mark was a deal lower than it is today. Yet from the mediaeval era until well through the seventeenth century we have literary and archaeological



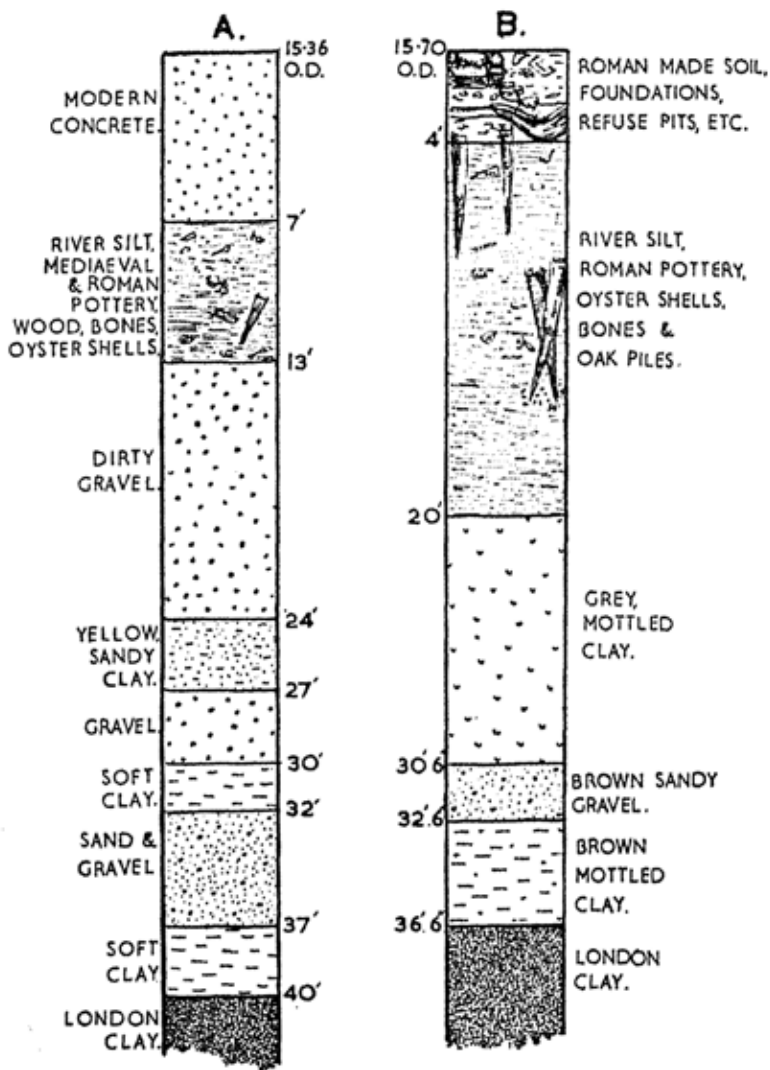
9. Plan of Roman city wall and existing river frontage. Modern key buildings stippled. Crosses at "A" and "B" indicate the position of borings shown in Fig. 10.

evidence to show that on occasions the river flooded as far inland as Thames Street.

In 1950, during the rebuilding of a Thames Street warehouse at New Fresh Wharf, workmen boring for pile foundations recovered a quantity of second- and third-century pottery from a depth of about twenty-five feet below the existing road level. The finds were brought up by the

boring equipment from a level that lay at least twelve feet down through the river silt, and at a point approximately forty yards south of Thames Street and perhaps sixty yards outside the supposed City wall. The fact that so much pottery was found in so small an area suggested that the boring tool may have passed through a Roman rubbish pit, in which case we would have to assume that this part of the site was dry land in Roman times and that the river flooded over it at a later date. A further complication was provided in 1955 by the evidence of workmen driving piles on the site of Minster House in St. Lawrence Pountney (Fig. 10b). Here, not far from London Bridge and directly to the north of Thames Street, and so apparently within the wall, boring tools passing through river mud drew up oak piles from a reputed depth of thirty feet below street level. While these were discovered to the south of the site, Roman occupation levels at the north lay at only fourteen feet below the street. Borings to the west along Thames Street at Bull Wharf revealed a rather similar section (Fig. 10a); while at nearby Brooks Wharf, second-century Roman pottery has been brought up by boring tools from a depth of thirty-one feet below street level.

The discovery in 1848 of part of a substantial Roman building on the site of the Billingsgate Coal Exchange also has some bearing on the question of tide levels. During the excavation it was found that the Roman floor was only a foot above high water mark, and on one occasion the workmen arrived in the morning to find their site inundated. The Roman building has often been described as a public or private bath-house. But even if this should not be a correct identification, the fact remains that it represents one of the few structures of Roman London that have been preserved *in situ* for the public to see. It was not possible to retain the entire building, some of which remains buried beneath adjoining premises, but one small room can be examined. We



10. Strata revealed by borings at "A", Bull Wharf, Thames Street, and "B", Minster House, St. Lawrence Pountney. (See Fig. 9.)

can see a seat built into the thickness of the north wall on which the Romano-British bathers are said to have sat while perspiring in the heat that percolated through a hypocaust beneath the floor. The floor was intact when discovered, but was broken through during the building of the Coal Exchange. The hole has now been enlarged to expose the hypocaust and the short tile pillars that supported the floor. When this feature was cleaned in 1951, it was discovered that the ground was still extremely wet and that damp was damaging the fabric of the building. As the remains had been open to the public for nearly a century there seemed little likelihood that the cleaning operations would reveal any hitherto unsuspected details. The gaps between the pillars had been packed with soil, presumably, it seemed, as a recent measure to give added support to the crumbling floor. At first this proved to be the case, for all that was found in it were fragments of milk bottles, electric light bulbs, rotting wood and a forged Roman coin. But right at the back, at a point that could only be reached by wriggling face down between the pillars, was found a deposit of wet, evil-smelling mud in which were discovered a number of late Roman potsherds and one virtually intact pot. These had clearly been undisturbed since the fourth century A.D., but how they came to be there will always remain a mystery.

It was hoped that the post-war rebuilding on the river-front close to London Bridge would yield traces of the original Roman structure, but although scores of timbers were unearthed none could be dated any earlier than the fifteenth century. Had the excavations continued to a greater depth they would undoubtedly have reached Roman levels and might have revealed the foundations of wharves and even the piles of the bridge itself. But as it turned out, we had to make do with the tantalizing scraps of pottery and wood that were brought up by the boring tools.

Just as all roads were said to lead to Rome, so, in Britain,

all roads led to London, and there crossed the Thames by way of the bridge. The bridge is presumed to have been a timber structure, probably of oak, with a drawbridge in the centre that could be raised to allow ships to pass up-stream. It stood to the east of the present London Bridge and a little above Billingsgate Fish Market. From time to time dredgers working in this stretch of the river have brought up pieces of blackened oak that they have ripped from piles imbedded deep in the silt. But these are more likely to have come from the mediaeval bridge than from the Roman. In the last century, during a very dry summer, the tide fell abnormally low, so low in fact that a number of antiquaries reported seeing lines of blackened timbers sprouting like an avenue of tree stumps from the river bed at a point where the Roman bridge is reputed to have stood. Today the elaborate controlling of the river's flow is unlikely to permit the tide to fall low enough for the piles to be seen again, even supposing that they still exist, and so we must accept the evidence for what it is worth. One could perfectly well argue that the timbers had belonged to a Saxon or even an early mediaeval bridge. But the finding or not finding of a definite Roman structure is of little importance, for there is no doubt that a bridge did span the river at that time, and its position is well enough marked by the line of the roads that led to it. If our interest in the Roman bridge was centred only round the structure itself, there would be little more to say; but in point of fact it is merely the key to the river's most startling treasure chest.

There can be few of us who have not at some time or other sung or recited the immortal fact that London Bridge is falling down. We were, of course, referring to the mediaeval London Bridge, which straddled the river for the best part of seven hundred and sixty years and which was invariably in need of repair. In 1824 work began on the present bridge at a site about a hundred and fifty feet up-stream from its pre-

decessor. But it was not until 1831, when the new bridge had been completed and the old was being dismantled, that large numbers of antiquities began to be found. The great mass of silt that had collected through the centuries was being dredged away to widen and deepen the main channel, the inshore work being done at low tide by workmen known as "ballast heavers", and in mid-stream by mechanical dredgers. No sooner had the clearance started than hundreds of well-preserved Roman coins began to be found. Up they came on the shovels and in the buckets, flashing like gold in the gravel and black, river silt. The workmen, then as now, felt certain that anything that glittered was gold, and they must have taken a deal of convincing that most of the coins were of copper or brass. However, one or two were of gold and quite a number of silver. But the coins were only a beginning, for soon other objects were found, among them brass medallions, iron spear-heads, tools, brooches, rings, pottery and later, in 1837, a number of metal statuettes. Most of the figures were of bronze and of fine quality and included images of the deities Mercury, Apollo, Jupiter and Ganymede. Finest of all the London Bridge statuettes was a silver figure of Harpocrates (Pl. XVI), bound with a gold chain and flanked by a dog and a bird, and with a tortoise between his feet. This had been found some years earlier, in 1825, and was immediately presented to the British Museum. Unfortunately there are conflicting reports concerning the circumstances of most of the London Bridge discoveries, and the silver Harpocrates is no exception. One account states that it was found during excavations on the Southwark bank for the southern abutment foundation, and another says that it was recovered from the main stream while sinking a cofferdam. Of the two the latter seems the more probable. The fact that all the statuettes were of a religious nature was not in itself surprising, for such figures were numbered among the chattels of most Roman households. The curious feature

was, however, that some of them appeared to have been deliberately mutilated.

The majority of the London Bridge finds went into the collection of Charles Roach Smith, who was present during most of the dredging operations. These and scores of similar relics that he had recovered from City building sites were brought to the notice of the public by the publication of a catalogue of his remarkable collection. The British Museum



11. Mutilated bronze of Jupiter. From London Bridge. The leg recovered later at Barnes. *Brit. Mus.* ($\frac{5}{12}$)

offered to buy his treasures for the then handsome sum of three thousand pounds, but Roach Smith would only sell on the understanding that the collection should be kept together as a single unit. This the museum could not do owing to a lack of exhibition space. In the following year, 1856, the British Museum offered to purchase the collection for two thousand pounds and to use it as a basis for a new Romano-British gallery. Roach Smith agreed, and his collection still forms the backbone of the gallery to this day.

There are some antiquaries who seem to have been born lucky, and Roach Smith was undoubtedly one of them, for whenever a discovery was made he was invariably on the spot. But Roach Smith's luck went even farther, as two of his London Bridge finds can show. At the time when the majority of the bridge treasures were coming to light, he obtained an incomplete bronze figure that he believed to be either of Jupiter or Mercury (Fig. 11). The gravel in which the headless and legless figure was found was taken up-river and deposited along the banks of the old Surrey Canal, and

used to build up the tow-path between Hammersmith and Barnes and at Putney. Cottagers living near by frequently found Roman coins and other small objects in it, and these they quickly sold to London antiquaries. Amazing as it may seem, one group of small objects that was offered to Roach Smith contained a missing leg from his statuette. More remarkable still was the story of a small bronze peacock (Fig. 12) whose tail was recovered from a dredger by Roach Smith but which could not then be identified. A year later, when he was watching the buckets of gravel being tipped into the hold of the dredging barge, he noticed a bronze object among the pebbles, and on picking it up he found it to be a model peacock that had lost its tail. The two pieces are now reunited as a result of Roach Smith's phenomenal stroke of luck.

Outstanding among the bridge finds was another relic with religious associations, a bronze clamp or pair of forceps, decorated with busts of deities representing the eight days of the Roman week and surmounted with the heads of Attis and Cybele (Pl. XV). As though this was not elaborate enough, each arm of the forceps was adorned with the beautifully cast heads of a horse and a bull, and ended in a lion's head terminal. While it was at once realized that the find had some religious significance, no one was able to say to what cult it belonged or for what purpose it was intended. However, there is now no doubt that the object belonged to the cult of the Great Mother Goddess, Cybele, for she and Attis (Fig. 13) were worshipped together. She was usually portrayed accompanied by lions, and these are present on the forceps; so too are the bulls whose slaying formed part of the ritual. Attis,



12. Bronze model of peacock. From London Bridge. *Brit. Mus.* (3)

according to the ancient legend, was loved by the Mother Goddess, and when he proved unfaithful to her she slew the nymph who had stolen his affections. Attis then went mad, deprived himself of his manhood and died. There are, of course, other legends of the Cybele-Attis affinity, but they all follow much the same line. The worship of the Great Mother was therefore accompanied by the wildest orgies, in which the candidates for the priesthood ended in a climax of self-emascu-



13. Bronze figure of Attis. From London Bridge gravel at Barnes.
Brit. Mus. (4)

lation. It is now believed that the Thames forceps were used in this part of the ritual. In the temple the eunuch priests, attired in female dress and with long, perfumed hair, celebrated the rites of Cybele with music and frenzied dancing that culminated in scenes of debauchery that would make a modern Englishman blench. It is hard to realize that today bowler-hatted business men must have their offices where once other City men indulged in rites as barbaric and unpleasant as any ancient religion could demand.

The Cybelline forceps were obviously an object of the greatest religious importance and would, therefore, have been regarded as one of the temple treasures. As such, one would expect them to have been treated with the same reverent care afforded to our own Church plate. Why, then, should they have finished up in the river? The answer could lie, perhaps, in the ritual itself. In Rome an annual cycle of festivals was devoted to Cybele and stretched from the 15th to the 27th of March. This reached its climax on the last day, when the silver statue of the goddess was carried in procession and bathed in a tributary of the Tiber. It is not

unreasonable to suppose that the same ritual went on in London and that the statue was carried from the temple, down what is now Fish Street Hill, and bathed in the Thames. It is possible that the ritual implements were borne in the procession and the priest entrusted with the forceps slipped when standing on the bridge, or in a boat, and so lost them into the water—where they remained until 1840.

Another suggestion, and one that has been popular ever since the bridge finds were made, is that the forceps, the deliberately mutilated bronze statuettes, two of which have Cybelline associations, and the various pieces of religious sculpture from the Walbrook, are all relics of the advent of Christianity, when temples were pulled down and their idols destroyed. This may or may not be the true explanation. But archaeologically there is little evidence to indicate either the power or importance of Christianity in Roman London.

The group of marbles from the Walbrook Mithraic temple was certainly hidden before the building went out of use, but why or by whom no one knows. A small pewter bowl found in the City is scratched on the base with a crude *Chi-Rho*, and an important group of pewter ingots from the river at Battersea bears the same symbol. There is no doubt that the latter represent all or part of a single hoard, for each ingot, besides the *Chi-Rho*, is stamped with the name SYAGRI or SYAGRIVS (Fig. 13). Unfortunately we can do no more than speculate as to the identity of Syagrius. But it has been suggested that this is the Syagrius who was secretary to the



(14)

14. Stamps on cakes of pewter, reading: Syagri, Spes in Deo, and Syagrius. From Battersea. *Brit. Mus. Layton Coll., York.*

Emperor Valentinian in 369 and consul in 382 A.D. Even at this late date metal ingots were stamped with the mark of imperial ownership, and it is possible that the Battersea pewter was intended for official purposes. On the other hand, Syagrius may have been a private individual to whom a lead mine had been leased, for this was common practice in the third and fourth centuries. Yet another Syagrius became the last independent Roman administrator of Gaul and was defeated by Clovis, king of the Salian Franks, in 486 A.D. at the battle of Soissons. It is just possible that the ingots are relics of his



15. Bronze lamp in shape of semi-human head. From London Bridge. (‡)

régime. However, the presence of Christian symbols on pewter can tell us little concerning Christianity in London. But we do know that it existed, and the literary evidence is here more valuable than the archaeological. It is known, for example, that a Bishop of London was present at the Council of Arles in 314 A.D., but it does not necessarily

follow that the pagan religions had already been ousted and their temples desecrated.

Although most of the Bridge finds were made during dredging operations associated with the removal of the old structure, a few came to light during the building of the new. One of the most interesting was found in 1827 by a labourer employed in sinking a coffer-dam. At a reputed depth of thirty feet below the modern river bed the workman noticed a metal object gleaming in the clay. When cleaned it proved to be a Roman bronze lamp made in the shape of a semi-human head (Fig. 15). The features were negroid, and the hair replaced by ivy leaves and grapes that suggested an association with Bacchus. But from the leaves protruded a pair of

diminutive horns reminiscent of Pan as he appeared in later Roman art. The top of the head was hinged to provide a filling-hole for the oil, while the mouth was open to allow the wick to protrude. Unfortunately there is no knowing what became of this fascinating relic, for although the report of the discovery stated that it was destined for the British Museum it would seem that it never arrived. In passing, another metal lamp is worthy of mention. This came not from the Bridge area but from Greenwich. It is now in the London Museum, and with its double-nozzle and curved handle terminating at the top in a ram's head and at the base in a human mask, it makes a most impressive exhibit. This is clearly an expensive object, the sort of thing you would expect to find in a wealthy house or perhaps in a temple. Greenwich may therefore seem a strange place to find such a relic. But as the London Museum's Roman Catalogue points out, part of a substantial Roman building (possibly a temple) was found and partially excavated in Greenwich Park. There may perhaps be a connection.

The most famous and impressive relic ever to have been found in the vicinity of London Bridge is, without any doubt, the colossal bronze head from a statue of the Emperor Hadrian (Pl. XII). This is said to have been found in 1834 during dredging operations to the east of the third arch of the modern bridge. There are, however, discrepancies among the accounts of the discovery, and one report states that the find was made two years earlier, in 1832. But while there are various opinions on this score, all are agreed that the Hadrian head is Roman London's greatest treasure. It is only matched in this country by a bronze head of Claudius which was fished out of the river Alde, near Saxmundham, by a small boy. This is thought to have been looted from the temple of Claudius at Colchester, but the Hadrian head is unlikely to have come from a temple statue. There must have been a number of these large, bronze figures in

London, for although only one head has been found no less than three hands and a foot have been recovered. A hand from Lower Thames Street which, like the head, is in the British Museum, is thought to have come from the Hadrian statue, but there can be no proof of this beyond its comparable proportions. Like so many archaeological finds, the Hadrian head is surrounded by a mass of "ifs", "buts" and possibilities. The most likely theory would seem to be that it stood on a column in the forum and was erected to commemorate the visit of the emperor to Britain in A.D. 121 or 122. Experts have pointed out that the artist had portrayed him at the age of about thirty, but that his visit to Britain did not occur until he was forty-six. It was, however, quite usual for older men to be shown at that stage, for thirty was considered to be the age when men were in their prime. At some time during the reign of Hadrian most of London was destroyed by a disastrous fire, and it is likely that the emperor subsidized the rebuilding. Such a gift might well have called for a commemorative statue. Again, as always, we are left with the tantalizing question—how did the head come to be in the river? It seems reasonable, as in the case of the Saxmundham head, to look for a political event which could have occasioned what can only have been a deliberate act of destruction. The best known opportunity seems to have been at the time of the sacking of London by the supporters of the usurper Allectus in A.D. 296, an event that is recalled by another find from the river which is discussed in the next chapter. It is not hard to imagine the looters seizing the statue as a symbol of imperial authority, hauling it down from its column, hacking the head from the shoulders and carrying it triumphantly on a spear down to the Thames. Finally, amid the drunken jeers of the satiated looters, it may have been carried to the middle of the bridge and thrown into the deepest water, where it was to remain for more than fifteen hundred years.

While the throwing down of symbols for one reason or another may account for the presence of some of the London Bridge finds, it cannot account for the thousands of coins that have turned up along the entire line of the Roman structure. The earliest were minted under Julius Caesar and the latest in the reign of Honorius. But it does not follow that the presence of coins of Caesar, Augustus, Tiberius or Agrippa indicated the existence of a pre-Claudian London. We have only to run through the dates on the small change in our pockets today to find that there may be a range of nearly a century between the earliest and latest minting. The same was true in Roman times, and therefore all these pre-conquest coins could have been in everyday circulation well through London's first century.

Roach Smith noted that the coins lay usually in chronological layers, the earliest in the lowest levels with later examples in each succeeding layer of silt, thus indicating that they were thrown into the water at various times all through the years of the Roman occupation. This is a perfectly reasonable supposition, but less convincing was his theory that they had been deposited "at the erection of a bridge across the river". "It is well known", he wrote, "what importance the Romans attached to coins as a means of transmitting events to posterity, and we can readily conceive that they would bury them in a place so favourable for security as the bed of the Thames." There is, however, no evidence that the bulk of the coins had served as foundation deposits, and it seems much more likely that they represent offerings to the gods at religious festivals, and as the donations of Londoners who hoped for good fortune on the water by placating the sea and river deities. The latter was a common practice in ancient times both in the Old World and in the New, and in fact continued on the Thames until less than a century ago.

Following a broadcast on the subject I received a gift of a

number of coins recently dredged from the river between Billingsgate and London Bridge. At first sight they appeared to be a listener's idea of a practical joke, for the coins were not Roman but common or garden Victorian pennies and halfpennies. The accompanying letter, however, was no hoax, and it served to draw a quite extraordinary, though unwitting parallel to the Roman river offerings. The writer was skipper of the dredger on which the coins had been found and who had seen them gleaming amid the evil-smelling black silt. It was only the surprising number that had made him take any notice of them, for it was never unusual for one or two coins to be found. None of the coins he recovered were any earlier than the late eighteenth century, and most of them, as already stated, were Victorian. He recalled that in the days when it was still a common sight to see rows of the picturesque, red-sailed Thames barges moored below London Bridge the skippers would throw a penny or a halfpenny into the river "to buy wind" before setting sail. Such a superstition must surely have been handed down through the centuries and have stemmed from the pagan river offerings. But whether this is true or not, it is certainly a strange coincidence that modern and Roman coins should lie side by side on the river bed, both relics of similar superstitions.

Some months after the finding of the Victorian coins I was invited aboard another dredger working in the same area. The anticipation of being able to watch the buckets coming up, just as Roach Smith had done more than a century before, was quite unbearable. Unfortunately the realization of this ambition was less rewarding. Standing on a barge on a cold, blustery, winter's day, watching endless loads of stinking mud being splashed into the hold, turned out to be one of the least romantic experiences imaginable. The work was being carried out roughly on the supposed line of the Roman bridge and therefore the least we expected were fragments of the much-vaunted oak piles. But all that appeared were

dozens of rusting tin cans, bent bicycle wheels, a length of steel hawser and a not very old coal-scuttle. Even after wading through the excavated silt and turning it over with a spade, the score remained at two small fragments of mediaeval pottery, three broken clay tobacco-pipes and two Victorian pennies. The haul could hardly have been more disappointing; but as if to show that the river could have done better had it been trying, it permitted a single, shining coin of the emperor Vespasian to come up jammed between the teeth of the grab. It was found—as these things always are—by one of the hands, who very sportingly gave it to me, I imagine by way of a booby prize!

Although the tide no longer falls low enough to expose anything of the river-bed in the area of London Bridge, a small patch exposed near Billingsgate has yielded a number of Roman coins, pottery and a gold ring, besides numerous relics of other periods. It appeared at first that this ground had been left behind when the flanking river frontage had been built up. However, it now seems more probable that it represents a load of silt deposited either during the building of the new bridge or as the result of later dredging operations. Nevertheless, it is some consolation to know that the relics it contains may have lain side by side with the more dramatic finds that made up the treasure of London Bridge.

With Fire, Sword and Stilus

THE story of Roman London has been told many times and there is no possible excuse for going into it here any deeper than is absolutely necessary. The history only affects us when it relates to the river and the objects that have found their way into it. Two major events do, however, come into this category, the first occurring in the early days of Roman occupation and the second towards the end of it.

The Romans who settled in Britain at the time of the conquest were largely intent on exploiting the population and the resources of the country to further their own ends. Among those who suffered at the hands of the colonists were the tribes of East Anglia, who were constantly subjected to the tyranny of petty authorities established in the new town that had grown up at Colchester, and which was then the seat of Roman military government. In the fateful year A.D. 61 Colchester was a colony for veteran soldiers who had completed their service and who had been given a plot of land on which to retire, most of which had been seized from its rightful owners. At about this time the Procurator was demanding the return of loans made to friendly land-owners during the reign of the late emperor Claudius, and, being unable to pay, the Britons were envisaging the loss of homes and livelihood. Many others were heavily in debt to individual Roman financiers who, following changes in the political scene, were likewise busily trying to get their money back. Most pressing among the usurers was the gentle Seneca, who

managed to turn his mind to such a sordid matter as the recovery of some ten million sesterii that he had loaned in Britain at a handsome profit to himself.

Prasutagus, king of the Iceni in East Anglia, was one of the rulers who had not opposed the Claudian invasion, and in return had been allowed to remain a vassal monarch within the Roman province. In 61 the king died, leaving half his estate to the emperor Nero so as to ensure the continued sovereignty of his family. But Nero was not a believer in the policy of maintaining petty rulers, and as Prasutagus had no male heir the Roman authorities declared the royal line extinct, regardless of the claims of his widow and daughters. Their property was confiscated and the royal palace sacked. Boudicca, the queen, was flogged and her daughters raped by the soldiery. Not content with this, Decianus Catus, the Procurator, demanded the seizure of all property belonging to Icenian nobles. It was this move that showed Seneca and his friends the danger signal, but it cannot have been particularly noticed here in Britain, for the Romans were completely unprepared for the events that were to follow.

The financial oppression and the cruel indignity to the honour of the royal house provided the sparks for a powder-barrel which exploded with a roar that rattled the very gates of Rome. Boudicca called the Iceni to arms and swept down on Colchester, the immediate symbol of their oppression. The neighbouring Trinovantes, remembering the loss of their land to provide smallholdings for the veterans, were quick to swell the avengers' ranks. In Colchester itself, where the complacent Romans were virtually unprotected, there had been rumours and omens of trouble, but few can have realized exactly what lay in store for them. Stories were circulating that the seas had flowed red as with blood and that the ebbing tide had left behind what seemed to be corpses on the beach. A vision of ruined Colchester had been seen

at the mouth of the Thames and strange cries had been heard in the senate house. More tangible was the inexplicable fall of the figure of Victory at Camulodunum, which tumbled from its pedestal to lie face-down in the dirt.

The Roman military governor, C. Suetonius Paulinus, was two hundred and fifty miles away, campaigning in Anglesey; while the nearest available legion was stationed at Lincoln, too far afield to save Colchester. Rumours of the rising reached London fairly quickly and the hated Procurator speedily press-ganged all who were capable of fighting, a pitiful two hundred or so, and sent them hurrying to reinforce the veterans in the Colonia. But they only arrived in time to swell the number of those who died in the holocaust that was Colchester.

With their morale soaring to the heights after an easy and symbolic victory, the Boudiccan hordes swept on towards London. A momentary halt was caused while Boudicca turned to meet the Ninth Legion which had hurried south from Lincoln. Again her victory was complete; the legion's entire infantry strength was slaughtered, the cavalry alone managing to escape. In the meantime, Suetonius was riding furiously back from Anglesey, leaving his infantry to follow as quickly as they could. Orders had been sent to the Second Legion at Gloucester to make all speed to London where it was to join Suetonius and the cavalry of the Fourteenth and Twentieth Legions. But the acting commander of the Second, Poenius Postumus, refused to risk his troops in another disaster and so left Suetonius to meet the Boudiccan army alone. He therefore found himself in London with a virtually useless body of cavalry, no infantry and a town filled with refugees. The Procurator, meanwhile, along with all those who could seize or afford to charter ships, had fled across the channel, waiting at a safe distance to see what would happen.

Suetonius had hoped that Boudicca would have been

diverted from her main purpose by the lure of easy pickings along the way and so allow time for his infantry to reach London. But as soon as he realized that the Britons had no intention of being sidetracked, he decided that it would be suicide to remain in London and so resolved to hurry north, avoid contact with the enemy and link up again with the rest of his army. This meant the abandoning of London, and the citizens, who saw in him their last hope of salvation, implored him to stay. But Suetonius was a soldier and not a sentimentalist, and so hurried away, leaving Londinium to its fate.

The town had no walls or other fortifications and was now inhabited only by women, children and men too old to fight. The shops were shuttered, the forum empty and the official buildings of the Procurator and his staff locked and deserted. A long line of refugees was doubtless making its way over the bridge to the safety of the Surrey shore—always providing, of course, that Suetonius had failed to destroy it before he withdrew. There can have been little time between the departure of the cavalry and the first sighting of the British rabble. No sooner was the vanguard at the outskirts of the town than the now familiar columns of black smoke belched up into the sky and London was afire. How many of its inhabitants rushed down to the river in a vain attempt to escape we shall never know. There was, as always, a section of the populace who favoured the Boudiccan cause, and these people remained behind awaiting liberation from the Roman yoke. They were to be bitterly disappointed, for the rebels slaughtered friend and foe alike without distinction. Everything of value was carried away as loot, and anything that could not be moved or was not worth seizing was smashed or burnt. The flames swept from end to end of the town, and were only extinguished when they died in a cloud of steam at the river's edge. The scene of carnage complete, Boudicca turned north again to serve Verulamium in the

same way before being finally routed by Suetonius and his regrouped army. Tacitus tells us that in the three towns seventy thousand Roman citizens lost their lives.

"The enemy," he wrote, "neither took captive nor sold into captivity: there was none of the other commerce of war: he was hasty with slaughter and the gibbet, with arson and the cross, as though his day of reckoning must come, but only after he had snatched his revenge in the interval."

No sooner was peace restored than London slowly rose again, much of the rubble no doubt being shovelled into the river and the bridge rebuilt. Today when builders cut deep into the soil below the City they come to a bright red band of burnt clay, all that remains to remind us of that day nearly two thousand years ago when London burnt for the first time. It seems inevitable that the river must have claimed an immense quantity of valuables, pottery, building rubble and human lives as a result of the Boudiccan rising, but little of it has yet come to light. The reason for this may be fairly simple, for the Thames at that time was considerably wider, with the result that the Roman foreshore lies beneath the warehouses that now line the Middlesex bank. However, the attentions of the Luftwaffe have left many a scar among them, and it is possible that during the rebuilding some of the historic relics may yet be found.

One would expect the Walbrook valley to contain much evidence of the disaster, but although various traces of destruction have been found, few can be definitely associated with Boudicca. Most curious among the finds have been the frequent discoveries of human skulls (Pl. XIII) which are littered from end to end of the Walbrook silt. Some hundreds of them have now been found, but no one has yet been able to produce a really satisfactory explanation of how they came to be there. The most popular theory supposes them to be relics

of the Boudiccan massacre, and it is for that reason that so much of the story has been retold here. It is only by understanding the course of events that we can see why these gruesome relics should *not* be connected with the revolt.

The first significant factor is that only the skulls are recovered, no arms, legs or even lower jaws ever being found. It does not call for a detective to deduce from this that the skulls came to their final resting place after parting with their flesh. They were not, therefore, severed from the bodies and thrown into the stream at the point where they were discovered. The theory that they are the heads of mediaeval or earlier criminals whose heads had been taken down from the poles on which they had been displayed and thrown into the Walbrook will not, therefore, hold water. Nearly all the discoveries have been made by workmen during building excavations, with the result that we have few records of stratified examples. But there is one important exception: a skull found sealed beneath the foundations of the northern Roman city wall which was erected in the second century. Thus we may assume, providing that the wall skull belongs to the same group as the others within the City, that the event which caused the death of these people must have occurred before the wall was built. The presence of this skull at the very northern limit of the Roman town also suggests that the others came to grief north of Londinium, and being roughly circular were parted from the other bones and rolled by the water down-stream towards the Thames. This would account for the absence of associated bones, but it is still not a very convincing story, particularly when considered in the light of recent opinions concerning the size of the Walbrook. It is true that some of the skulls have been cut by sharp instruments, conceivably by axes or swords, and this would lend weight to the popular Boudiccan association. Yet if this is to be the answer we have to accept one very unlikely feature, which is that an encounter took place just north of the town.

But we know that Suetonius deliberately avoided a brush with the enemy and therefore there was no one left to go forth to meet the attackers, save the citizens themselves. It is much more likely that they would have been hurrying south across the river than northward into the jaws of the rabble.

By way of a footnote to the problem of the skulls, it is worth recalling the discovery of another jawless skull which turned up near the Walbrook in a timber-lined well of the first century A.D. The strange feature here was the fact that the skull seemed to have been held down in the well silt by an octagonal wooden post which was thrust into the side of the cranium. This may have been purely fortuitous, or, on the other hand, it may not. If not, then the romantic mind might be forgiven for wandering in the direction of thoughts of witchcraft and of vampires killed by stakes driven into the heart. But while such thoughts are entertaining, they lead us away along the road of idle speculation, a road which, for the archaeologist, bears a prominent No Entry sign.

While the Boudiccan massacre was one of London's outstanding events, another which must have left its mark in the river occurred in A.D. 296. By this time the fabulous Roman Empire was cracking, and colonials were learning that they could pull feathers from the tail of the Imperial eagle with impunity. One such feather was being extracted in Britain at the end of the third century. The emperor Diocletian had sent a general named Carausius to take charge of the Low Countries, with instructions to suppress piracy along the coasts. Having completed this task Carausius had then crossed to Britain and had declared himself emperor. At first efforts were made to dislodge him, but when these failed it was thought prudent to accept him as a joint ruler. But Carausius's natural satisfaction was to be short-lived. Diocletian soon cut him off from the Continent, and would probably have made further efforts to drive him from Britain had the usurper not been murdered by his lieutenant,

Allectus, who then declared himself Emperor of Britain. The situation was obviously deteriorating, and so the Roman general Constantius Chlorus was sent to remove him.

Constantius sent one section of his fleet under General Asclepiodotus into the Solent, while his own ships lost their way in a fog and instead of landing in Kent eventually found themselves in the Thames estuary. In the meantime Allectus was attacked and slain in Hampshire, whereupon the remnants of his army retreated to London, where they proceeded to sack the city. It was while they were thus enjoying themselves that Constantius and his ships appeared in the Pool. The troops landed virtually unopposed and proceeded to slaughter the drunken looters in the streets of London, whose inhabitants, we are told, felt "a sentiment of gratitude and pleasure at the sight".

The freeing of London by Constantius Chlorus was instrumental in giving us the first recorded picture of London and its river, for a commemorative medallion was struck to mark the event (Pl. XXIV). This was dug up at Beaurains near Arras together with a hoard of gold medallions, coins and jewellery. On one side of it is shown a profile portrait of Constantius, and on the other he is shown arriving at the gates of London and being welcomed by a kneeling citizen. One of his galleys can be seen on the Thames, and round the whole design runs a legend referring to Constantius as the "restorer of eternal light". This may be taken to mean that Britain was returning from the darkness of isolation into the brilliance of the Empire.

In 1910, during the building of County Hall at the Surrey end of Westminster Bridge, part of a Roman ship was discovered lying beneath the black river silt twenty-one and a half feet below the existing street level (Pl. XIV). Only a section of the vessel, thirty-eight feet long and sixteen feet wide, still remained, and it was conjectured that the vessel had possibly struck a sandbank and had subsequently broken up. A

section of the mast was in fact found near-by. It has been suggested that this was one of the ships belonging to the dead Allectus which had escaped up-stream on the appearance of Constantius and his fleet. In support of the theory it has been pointed out that a number of large stones were found in the ship and that one of them lay imbedded in the bottom, suggesting that it had been dropped from a considerable height and so was perhaps a missile fired at the vessel while making good its escape. It cannot be denied that the dating evidence enhances the suggestion, for four coins found in the ship are those of Tetricus the Elder (A.D. 268-273), Carausius and of Allectus himself. Regrettably, archaeologists are unable to accept guesses however plausible they may seem, and so the London Museum, which now houses the ship's remains, states in its catalogue that the Allectus theory "is a conjecture entirely unsupported by evidence".

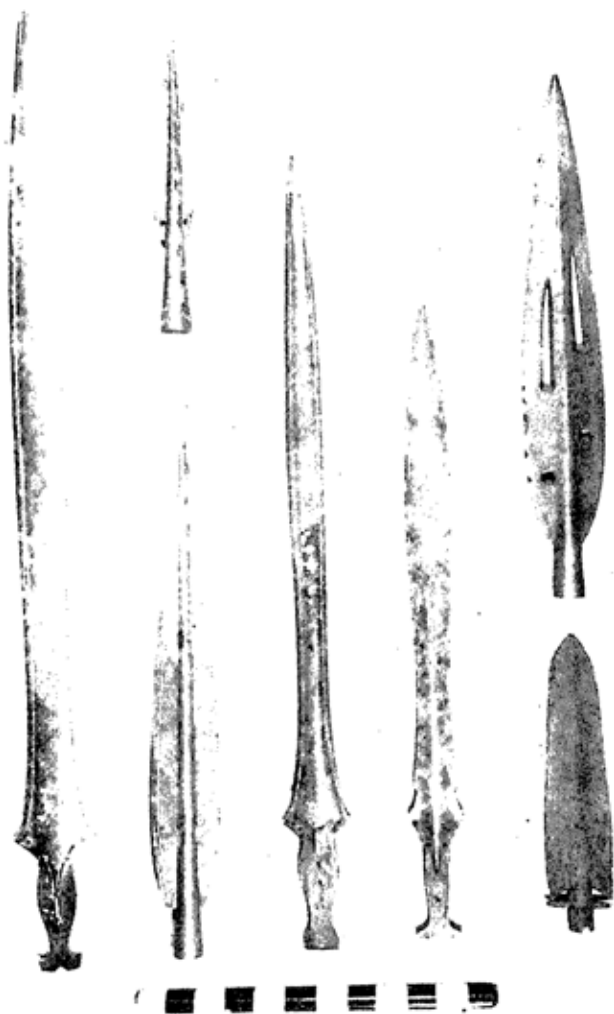
The County Hall ship was just about the largest Roman object ever to be found in London, and it presented a series of problems to the authorities who were responsible for its safe preservation. When first uncovered the timbers were completely waterlogged and, as *The Times* put it, were of the consistency of mushroom. Although the discovery was made in August 1910, it was not until the end of August 1911 that the remains were finally removed from the site. During that time efforts were made to preserve the timbers by coating them with glycerine and sealing the entire find within a casing of wire netting, but not even the most charitable among us would describe the result as a complete success. The wood shrank, split and twisted, eventually breaking up into a series of short lengths. Nevertheless the entire midship section was transferred, bodily, into a specially built wooden box forty feet wide and a hundred feet in length, which was raised on to two trucks and eventually hauled up a ramp to street level. Once there, the gigantic parcel was harnessed to

twelve horses and at four in the morning set out over Westminster Bridge on the day-long trek to Kensington Palace, the home of the London Museum. Led by Guy Laking, the director of the museum, on horseback, the procession made its way through London amid the cheers of the populace. Lest any of the spectators should be unaware of the contents of the box, the whole thing was draped in a tarpaulin on which huge whitewashed letters proclaimed: "Roman Boat—London Museum." This was showmanship in the Barnum tradition and would make any model museum curator die of shame; but it captured the imagination of the public and sent Londoners hurrying to what was then a very new museum. The severest critic could hardly condemn a man for encouraging the public into his museum, and there might even be a few heretics in museums today who feel that a little more showmanship and a little less dusty erudition would not be amiss.

A final aspect of the Allectus affair takes us back to the story of the Walbrook skulls and provides a possible, though unlikely, explanation. That notoriously inaccurate, twelfth-century chronicler, Geoffrey of Monmouth, stated in his *Historia Britonum* that when the relieving forces arrived at London all the looters were killed save one legion and its commander Gallus, who "... surrendered himself and his men to Asclepiodotus, who was disposed to give them quarter; but he was prevented by a body of Venedotians, who rushed upon them, and the same day cut off all their heads upon a brook within the city, which from the name of the commander was called in the British tongue Nantgallim and in the Saxon, Gallembourne". It is certainly an extraordinary coincidence that a single stream should run through the City and that it should contain a quantity of human skulls. Nevertheless, the same objections still remain, the skull beneath the wall crying out for an earlier date and the absence of lower jaws indicating that the heads had been

parted from their bodies outside the City. Where Geoffrey acquired this information no one knows, and it is even possible that he was confusing the freeing of Londinium by Constantius Chlorus with an earlier massacre.

We have discussed at some length the few discoveries that could conceivably be associated with established historical events, but these cover only one corner of the whole. Literally hundreds of Roman finds have been made in the river, yet all but a handful are isolated relics, interesting in themselves, but of no real archaeological importance. However, to the average person who peers through the glass of a dusty museum case, the object is the thing that matters, and its scientific significance takes a very distant second place. Unfortunately it would serve no good purpose to mention all the Roman relics that have turned up, for the list would reduce this chapter to a simple catalogue. The fact that two Roman keys, one iron the other bronze, were found at Hammersmith, that intact Roman pots have been discovered in Jessop's Creek, Chiswick, at Mortlake and elsewhere, or that a bronze three-ounce weight was found near the Temple, are not in themselves particularly useful or even interesting pieces of information. We know nothing about the objects or of the circumstances of their discovery, neither are they rare or unusual finds that could conceivably gladden the heart of a museum curator. But on the other hand, the less hardened among us may look on such things as treasures beyond price. The man who finds a Roman pot is understandably and quite rightly thrilled by his discovery. It makes no difference to him that the vessel is of a common type and that three hundred and twenty-one museums have four examples apiece. The fact remains that his find is a Roman pot which was made nearly two thousand years ago and now he has found it. By his simple action of lifting the pot out of the mud he has linked hands across the void of time with the person who lost it into the river. No other hand has touched



XI. Bronze swords and spear-heads recovered by the Thames Conservancy Board. 1 and 4, Early Iron Age; 2, Middle to Late Bronze Age; the remainder Late Bronze Age. *Reading Mus.*

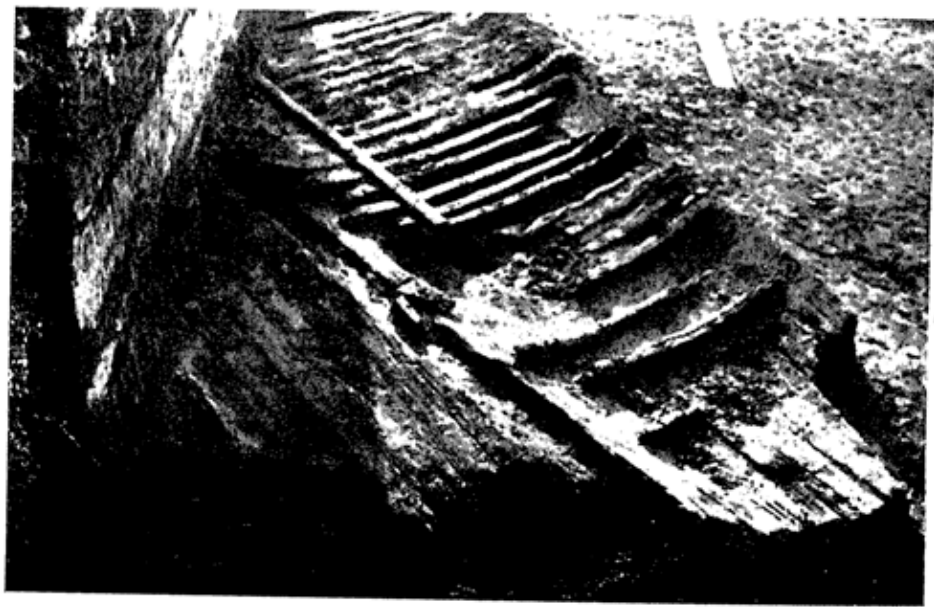


XII. Colossal bronze head of Hadrian. From London Bridge. *Brit. Mus.*



XIII. Human skulls, some with sword cuts (?). From the Walbrook. *Guildhall Mus.*

XIV. Remains of Roman ship found near Westminster Bridge. Late third century. *London Mus.*

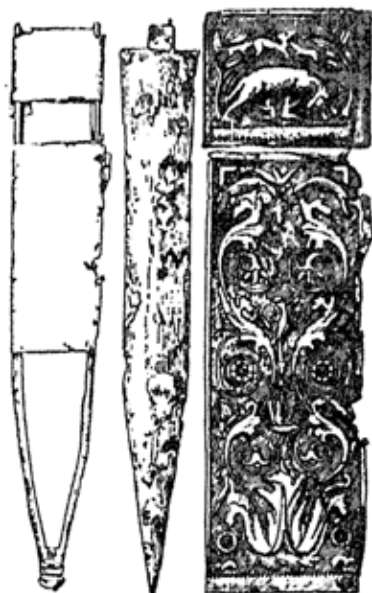


it from then till now, and that knowledge makes him treasure his pot far more than any relics that he might buy from an antique shop. But the interest in such cases is very personal and can mean little to any but the finder. There are, however, a number of more spectacular finds that possess a very considerable interest in their own right, and it is to these that we must now turn.

Few of the river's Romano-British antiquities can claim to be objects of great beauty or even examples of superb craftsmanship for, sad to relate, most of the finer discoveries are thought to have been imported. The use of red enamel, copying earlier coral inlay, had played an impressive part in British La Tène art. But it was only after the conquest of Gaul that Roman ideas began to cross the Channel, and with them came the art of enamelling in a variety of colours. One of the finest examples of this work was found in the river, and like so many other metal objects it was absorbed into the Roach Smith Collection before passing to the British Museum. The relic is a flat, bronze plaque, seven inches in height, in the shape of an altar (Pl. XVIII). Enamels of red, blue and green have been applied by the *champlevé* process in which the metal is cut away with a graving tool to form channels and hollows into which the enamel is poured. The decoration includes a pair of vases in blue, gryphons and stylized lions in green and in the centre a gabled rectangle ornamented in blue and red. The fact that the edges of the metal have not been trimmed after casting indicates that the plaque was never finished, and so suggests that it was made in Britain. Recalling the evidence of iron and bronze-working derived from excavations in the Walbrook valley in 1955, where a number of inlaid studs were among the finds, and remembering also the discovery many years ago of lumps of green enamel in Nicholas Lane, we may perhaps go further. It seems possible that not only is the Thames plaque of British manufacture, but that it may

even have been made in Londinium. But wherever its exact place of origin, one thing at least is certain; this wonderful object is still one of the most important examples of enamelling from the Roman era yet found in Britain.

While the river's prehistoric relics were largely of a military nature, those of the Roman era have proved to be



16. Gladius blade and scabbard decorated with embossed bronze plates. From Fulham. *Brit. Mus.* (4)

more varied. One can walk on the foreshores and frequently discover pieces of shattered pottery—fragments of amphorae that had contained wines from the Mediterranean, pieces of the fine red Samian table wares from the potteries of Gaul, and sherds from our own kilns in Norfolk, Middlesex or Kent. They are all there if only we are able to spot them, as also are the small metal objects—box fittings, bells, broken

knives, coins, and such things as spindle-whorls, fragments of glass and jewellery. But while military relics are less common, they are also a deal more spectacular. First and foremost among the really spectacular is the famous *gladius*, or legionary short-sword (Fig. 16), which was dredged up at Fulham in 1873, and which was presented to the British Museum by Thomas Layton. It was one of the very few Thames relics that he ever allowed to leave his treasured collection. The sword was without its hilt, but still retained part of its scabbard, and it was this that gave the weapon its interest. The scabbard was elaborately decorated with two bronze panels, one ornamented with an elaborate leaf and floral scroll motif, with rabbits, butterflies and birds in the spaces between, and the other showing the Capitoline Wolf suckling Romulus and Remus. It is undoubtedly the finest example of its kind yet found in Britain and belongs to the same family as the better-known "Sword of Tiberius" from Mainz, which also is in the British Museum.

The only Roman helmet from the Thames and its tributaries is said to have been found in the Walbrook. It is perfectly preserved, and of the standard first century, legionary pattern. One could hardly describe it as a thing of beauty, for it possesses a large and ugly neck-guard vaguely reminiscent of the helmets worn by American firemen. Just as modern military equipment goes back to the Quartermaster's stores when its owner has moved on, so, in the Roman army, armour was issued to one man after another. Thus we find the names of four successive soldiers scratched on the neck-guard of the Walbrook helmet. Whenever a relic of this kind is discovered we immediately begin to speculate as to how it came to be where it was. The very fact that the helmet is well preserved makes it unlikely that it would have been deliberately thrown away.

Until comparatively recent years it was generally assumed that Londinium was purely a trading centre without any

military garrison. But post-war excavations have uncovered the remains of a fort in the north-west corner of the city which was built some little while after the Boudiccan rising, seemingly shutting the stable door after the horse had run amok. The fort walls on the north and west were later incorporated into the second-century town wall. In view of this discovery it is quite possible that the Walbrook helmet belonged to a member of the fort's garrison. At least it is



17. Outline of a third-century parade helmet, from Guisborough, Yorkshire, with the Southwark fragment superimposed. ($\frac{1}{2}$)

certain that it is not a relic of the Boudiccan massacre, for it was the absence of infantry that brought about London's destruction.

A cheek-piece from a legionary helmet has been found at Brentford, and a fragment from an elaborately decorated parade helmet was found by the writer on the Southwark foreshore (Pl. XVII). The fragment of embossed bronze was folded in half and much battered, and at first seemed to be nothing

more interesting than a plate from a Victorian brass fender. But when opened out and cleaned, it proved to be part of a helmet very similar in design to a complete example from Guisborough in Yorkshire (Fig. 17). The latter is dated to the late third or fourth century, and there is no reason to date the Thames fragment much earlier. Could this be a relic of the Allectus affair? There is no way of telling, but it is certainly entertaining to be able to speculate—providing always that speculation never becomes indistinguishably mixed with the facts!

Coins seem to hold a strange fascination for many people, and whenever visitors are shown round an archaeological excavation their first question is invariably, "Have you found any coins?" It would therefore be shirking a duty to try to avoid saying something about the Roman coins from the Thames. By far the largest number have been found, as I mentioned earlier, in the area of London Bridge. But there is nothing unusual in the discovery of one or two examples scattered here and there on the foreshore. A number have been found west of the bridge on the Southwark side, while others have turned up along the north bank. In most cases the coins date from the later years of the Roman occupation and are in a very poor state of preservation; many belong to the tiny denomination known as *minims*, and so are rarely much larger than the diameter of a pencil. But this is not always so. A number of earlier examples have been found and there have even been instances of coin hoards being discovered. To most of us the word "hoard" conjures up exciting visions of chests filled with gleaming money. But, sad to relate, in archaeological parlance even the smallest handful of coins can be classed as a hoard.

At Whitchurch Weir Pool, near Reading, thirty-two first- and second-century bronze coins were dredged up, and at Maple-durham Lock workmen recovered a much larger number, the total originally being described as measuring "about a pint in volume". Today only four coins from this hoard still survive. Another group, said to have been found as a hoard, is now in the Reading Museum and includes five very worn Roman coins, two Roman brooches, pottery fragments and a corroded halfpenny of George II. Nearer to London we know of a small number of Roman gold coins being dredged up at Kingston and of another small hoard of coins of Carausius being discovered on the south shore at Hammersmith. A considerable number of isolated coins have been picked up on the Hammersmith foreshore, but it is

probable that many of them were deposited there during the nineteenth century in gravel dredged from London Bridge.

As always one comes back to the question of how the coins came to be in the river. Money is surely the last thing that anyone would throw away. There are a number of possible explanations, and as we have no exact details of the circumstances surrounding the discovery of any of the river "hoards" we can take our own choice. In some cases the money may have been buried in a pot on the river bank by an owner who intended to return for it at some later date. For an unknown reason he failed to do so, and eventually the changing level of the river submerged the bank in which the coins lay hidden. The absence of bridges could well have contributed to the loss of many coins and other relics into the river. Travellers crossing at the fords may have stumbled and lost their purses into the mud, or a cart deviating from the hard ground could have overturned and tipped its load into the water. There must have been scores of such accidents, any one of which might have caused the loss of money and valuables.

Although coins can tell us a good deal about the times in which they were used, providing portraits of the emperors, names of mints and so on, they can reveal nothing of the people through whose hands they passed. To this extent coins tend to be singularly impersonal, lacking the human interest that surrounds, for example, a common cooking pot that passed its life as the property of one family. A few of the river's Roman relics can be attributed to a single individual and so become still more personal. One such find was made at Tilbury in the early years of the present century under circumstances that are far from clear. The object in question is an incomplete Roman tombstone (Pl. XXII) which bears an inscription in Greek reading: "Demetrius, to Heraclia his wife (set up this stone) at the expense of her own estate as a memorial to her." Above the inscription were the sculptured

portraits of Heraclia and her husband, but the stone is broken and only the male head remains.

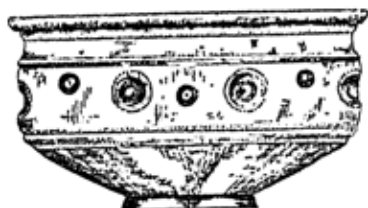
The tombstone was found on the Tilbury foreshore during excavations for a dock, and was deposited in a local office of the Port of London Authority along with a miscellaneous collection of iron cannon-balls and other unimportant antiquities. There the pathetic memorial remained until it was re-discovered by a visitor to the office in 1932. By that time no one could remember either how or when the P.L.A. acquired it. Eventually the foreman who had worked on the Tilbury Dock excavation was traced, and he recalled that the stone had been found on the foreshore and that it had been deposited in his office. The relic was removed in 1932 to the P.L.A. headquarters and later passed to the London Museum. Since the war, however, the stone has been on loan to the Reverend P. B. Clayton, who originally drew attention to it, and who now exhibits it along with other Roman antiquities in the crypt of his famous "Toc H" church of All Hallows by the Tower.

The problem of how the Heraclia memorial came to be in the river still remains to be answered. It could, perhaps, have been thrown there in Saxon times, or even cast away quite recently, a broken souvenir of the Grand Tour. A more likely answer may be that the stone came to Tilbury from London in a load of rubble that was used to reinforce the shore. We know that hardcore excavated during the building of the underground railway station at Tower Hill was taken to Tilbury, and it is possible that the tombstone went amongst it.

The Heraclia memorial was not the Tilbury shore's only Roman discovery, for it was there that archaeologists excavated the remains of wattle huts with plank flooring, dating from the first and second centuries A.D. The structures themselves were not particularly remarkable, but their position between the modern high and low water marks clearly

shows that eighteen hundred years ago this foreshore stretch was comparatively dry land, lying a short distance from the river's edge. These finds therefore support the evidence of changing river levels derived from the up-stream excavations at Brentford and Isleworth (p. 43). It is worthy of note, however, that while the Roman structure on the Brentford site appears to have been rectangular in plan, those at Tilbury retained the more primitive circular form.

When looking at such pathetic relics as the Tilbury tombstone or at the battered remains of the County Hall ship we



18. Colour-coated pottery bowl. Found during excavations on the Isleworth-Brentford foreshore. Early fourth century. (Reconstruction.) ($\frac{1}{2}$)

would be inhuman if we did not spare a thought for the people to whom these things once mattered. That, after all, is the object of archaeology, to gain sufficient information about people to be able to build up a picture of their lives, to know how they dressed, worked, entertained themselves and finally how they died. To the average layman the era

of Britain's Roman occupation seems a very, very long way away, so far away in fact that he finds it hard to believe that the Romans could have attained a standard of civilization in any way comparable with our own. It is only when one visits the site of a villa and sees the beauty of its mosaics, or goes to a museum and inspects the tools, crockery, jewellery and even women's beauty aids that he realizes that not only were the Romans themselves civilized but that they imparted their culture to their most distant provinces. Every now and then something is found that breaks through the barrier of time and allows us a glimpse of a Roman Britain in which the

every-day problems of living were not so very different from our own. One such find was discovered many years ago in the Walbrook, but has only recently aroused the attention that it deserves. It is a fragment of a thin, wooden writing tablet of the typical Roman pattern, whose centre is recessed to take a thin coating of wax in which the writing was scratched by means of a pointed metal instrument known as a *stilus*. Numerous complete and broken tablets have been found in the Walbrook silt, along with literally hundreds of iron and bronze *stili*. Occasionally the scribe was too heavy-handed and allowed the point of the *stilus* to penetrate the wax, cutting into the soft, wooden tablet beneath. Although the wax has long since vanished, sufficient scratches may remain on the wood for experts to be able to distinguish the words.

This Walbrook tablet was found to be liberally and clearly scratched, but until it came up for auction at Sotheby's in 1953 no one had succeeded in reading it. After the sale the relic was given to Professor Ian Richmond of Durham University, who was at last able to decipher the inscription. He found that he was reading a page from a private letter sent by a wealthy Briton to his servant in Londinium. It is probably the most human document ever found in Roman London. It read:

"Rufus, son of Callisunus, greeting to Epillicus and all his fellows. I believe you know that I am very well. If you have made the list, please send. Do thou look after everything carefully. See that thou turnest that slavegirl into cash . . ."

The Shrouded Years

CONFUSED by internal intrigue and warred upon by barbarians beyond the frontiers, the greatness that was Rome declined and finally fell to pieces. During the last fifty years of Roman rule in Britain the regular garrison was slowly withdrawn to patch up crumbling continental provinces and to build imaginary empires for commanders suffering from delusions of grandeur. Britain was beset by enemies from Europe, Scotland and Ireland, but regardless of these dangers, the emperor Honorius sent messages to the British cities telling them to fend for themselves. Although there seems to have been a subsequent very temporary local re-occupation, the rescript of A.D. 410 virtually ended the story of Roman Britain.

London was one of the cities that knew what it was to suffer the attacks of Saxon marauders, and she was to learn through bitter experience that her river could bring death as easily as it could carry trade. With the last Roman soldier withdrawn, the attacks became more frequent, and it has been suggested that the last remnants of a decaying Roman London were quickly razed to the ground. Today, however, this theory is not so readily acceptable.

While much of the story of Saxon England relies on legend, on inaccurate historians and scrappy archaeological evidence, we do know that it was a tale penned with the blood of those who died defending their homes. Even the name *Saxon* recalls this fact, for the word is popularly considered to

derive from the invaders' short thrusting sword, the *seax*. Against such a background it is hardly surprising that the majority of the river's Saxon relics are of a military nature. While the Roman conquest of the Thames valley was an orderly operation, a steady progression from "A" to "B", the Saxon attacks were less easily plotted. Their arrival was not the result of a single military offensive, but rather a creeping infiltration of settlers who were a law unto themselves.

Before going any farther it seems advisable to establish who these warlike settlers were, and where they came from. But even this apparently simple problem is fraught with pitfalls and complications. The man in the street who knows little about Saxon history, and who cares less, is probably content to believe that the Romans departed and that their place was taken by a new army of conquerors coming from Saxony. But it is not so simple as that. The invaders were in fact drawn from the Angles, the Saxons and the Jutes, hailing from southern Denmark, Saxony and Jutland respectively. The Angles settled along most of the east coast, the Anglo-Saxons in the Welland, Nene and Ouse valleys, the Saxons in the Thames valley and surrounding counties, while the Jutes took root in Kent, on the Isle of Wight and in part of Hampshire. This is reducing the whole equation to its lowest possible terms, but for the present purpose it will suffice.

The Venerable Bede, who was writing in the eighth century, is always the first "authority" to consult when trying to sort out the problems of Saxon England, and it was he who provided the most detailed account of the early Saxon settlers in the Thames valley. In the early fifth century the Picts and Scots were sweeping down from the north, murdering, burning and looting as they came. Pirates were raiding the west coast and Saxon attackers were doing much as they liked along the east. The country was in turmoil. In A.D. 446 the British sent a pathetic plea to Rome for help.

"The barbarians drive us back to the sea," they wrote. "The sea again putteth us back upon the barbarians, thus between the two kinds of deaths we are either slaughtered or drowned. We are the remnants that survive of the Britons, and are your subjects, who, besides the enemy, are afflicted by famine and mortality, which at this present extremely rageth in our land."

Bede took these details from the sixth-century writer Gildas, who was more concerned with dramatic effect than with accuracy, and so it is difficult to distinguish the facts from the fancies. Gildas would have us believe that this was the third British plea to Rome and that, although it remained unanswered, the first two requests had actually resulted in the despatch of military aid.

Their final plea to Rome ignored, the Romanized British cities turned elsewhere for help—to Wales, soliciting the aid of the powerful leader, Vortigern, little realizing that they were leaping from the pan into the fire. It is true that Vortigern came to their assistance, but the methods he employed left much to be desired. Instead of scattering the foe himself, he invited the Saxon leaders, Hengist and Horsa, to come over and settle in Kent in exchange for military assistance and also, so legend has it, for the hand in marriage of Hengist's daughter Rowena. Hengist then used his Kentish concession as a bridgehead for the massed infiltration of continental attackers. Vortigern quarrelled with him and war broke out between them, Hengist being defeated by Vortimer, the son of Vortigern. At this point the story becomes as confused as a Ruritanian operetta, for, having been accused by the Bishop of London of having endangered both his soul and the crown by careless government and adulterous living, Vortigern was eventually deposed in favour of his son. But Vortimer, after defeating the Saxons in a number of battles, was poisoned by Rowena, whereupon Vortigern was then

reinstated; shortly afterwards, Hengist made overtures of friendship. Vortigern and his nobles agreed to a meeting and went off to make pacts of friendship with Hengist at his camp on Salisbury Plain. But once there Hengist seized Vortigern as a hostage and slaughtered his followers to the last man. As it turned out, this example of talented Saxon diplomacy paid the fullest dividends, for in the end we find Hengist obtaining Essex, Sussex and Middlesex in return for Vortigern's freedom. Thus, so the literary sources would have us believe, the Saxons gained control of the Thames valley.

If the Hengist and Vortigern story is true, then we must accept the fact that London itself formed part of the ransom. But it does not necessarily follow that the citizens yielded to Hengist and his barbarians. On the other hand, there are those who believe that the Saxon penetration towards London may not have come because of Hengist at all, but from attackers working their way south from the Wash and the Humber. In either case, it seems likely that the intensely Romanized towns of the south-east, e.g. Colchester, St. Albans, London, Rochester and Canterbury, existed well through the fifth century as sub-Roman islands amidst a Saxon sea.

This seems to be a reasonable supposition, for there can be little doubt that Roman culture was most deeply rooted in the south-east, and therefore the principal towns would have served as reservations for displaced Roman citizens. While in the north the conquerors' customs and way of life would have been quickly accepted, in the south they would have met with stiffer opposition. This is illustrated, for example, by the dearth of cremation burials close to the large towns where the late Roman rite of inhumation still prevailed.

The story of the river during these troubled times is necessarily bound up with that of London, for he who governed the city held the bridge, and in theory he who held

the bridge had the power to dictate who should and who should not send their ships up-stream beyond London. There is every reason to suppose that by the beginning of the fifth century the city was partially in ruins and that the wharves and water-front were in a comparable state of disrepair. The days of the rich merchants and flourishing trade relations with the Continent were over. No longer did the galleys bring rich textiles, glasses, silverware, pottery and wines to grace the tables of middle class Britons. With the Roman Empire in tatters, there was little incentive for Near Eastern merchants to risk their goods on the long voyage to a Britain that was no longer a profitable seller's market. While it is perfectly true that many fourth-century villas show their owners to have been men of substance, who appreciated the good things of life, they cannot be taken as a yard-stick by which to judge the country as a whole. Such magnificent silver treasures as those found at Traprain Law in Scotland and Mildenhall in Suffolk are witnesses to the fact that there was still a market in the decaying western provinces for the products of fine craftsmanship. But it does not mean that such things were necessarily shipped to Britain in bulk. London could no longer claim to be the centre from which merchandise could be distributed up and down the land. With the countryside in turmoil, communications disrupted and a drastic cutting of foreign commerce, the City seems to have been gripped by a creeping paralysis, such as could reappear today were London stricken by a simultaneous and prolonged dock and transport strike.

It is generally agreed that by the end of the third century London was suffering a cultural decline, and that in the fourth, the once-fine buildings were either in ruins or being dismantled to provide building materials for more prosaic structures. The bastions of the city wall provide a classic example, for parts of them are built from stones purloined from elsewhere, making use of sculptured figures, capitals

from pillars and even tomb fragments. With these and comparable finds in mind some writers have been prompted to draw the most dramatic pictures of London's inhabitants pulling down temples and public buildings, and carrying off the masonry to protect their own imperilled homes. Unfortunately a mundane explanation seems more probable, for there is reason to suppose that by the middle of the fourth century decayed and ruined public buildings were no longer being repaired, thus freeing quantities of building materials for other purposes.

A large Roman building, discovered in 1952 beneath Lloyd's offices in Lime Street, was found to have been built in the second century, added to in the third, and burnt down in the fourth. Although there is no evidence that it was ever rebuilt, there is a strong likelihood that part of it was occupied by squatters in the second half of the fourth century, and that at this time some of the wall foundations, along with tiles from the hypocaust, were dug up and carted away.

Among the first reactions of visitors to the site of an excavation in London is amazement that all the stones used in the buildings should have been brought from quarries many miles distant. It rarely occurs to them that London is without any local source of stone. During the first and second centuries, when most of the city's substantial buildings were erected, this lack of materials did not matter unduly, for roads were good, money plentiful and slave labour abundant. But at the end of the occupation things were very different, and every stone was valuable. This state of affairs existed all through the Dark Ages into the early years of the mediaeval era, and so it is not unusual, when excavating a Roman building, to find that long stretches of the foundations have been dug out even to the last stone and carried off by later builders. In 1954 the foundations of a late Saxon church were uncovered on the site of the mediaeval church of

St. John-the-Evangelist in Watling Street. They were found to be constructed almost entirely from tiles and stones robbed from a nearby Roman building.

By comparison with the archaeological evidence available from the first centuries of Roman London, the last years are but poorly represented; and when we come to the early Saxon era the evidence is absent altogether. There are no buildings, no pottery, and no coins, the principal early Saxon finds being a brooch from Thames Street, a buckle from outside the city wall, and a small pendant found in one of the bastions. But three small objects do not make a living city, and many people have asserted that for more than a century London was totally abandoned. In support of this theory they point out that the mediaeval and Roman street plans do not coincide, thus indicating that the later Saxon London owed nothing to Roman planning other than the use of the same site within the old protecting wall. Such a state of affairs, it is argued, could only arise if the city were abandoned for a considerable length of time. But there are always two sides to every argument, and so one must point out that the streets of Rome bear little resemblance to the ancient plan, yet the city has never lain desolate for more than a month or two in the whole of its history.

Whatever the fate of London may have been, there can be no doubt that the Thames played its part, however obscure, in the early history of Saxon England, and it is obvious that this part was largely military. As in Roman times, the river provided a defensive ditch and, as one would expect, the relics of battle are scattered in many of its reaches. There are early spear-heads from Clivedon, Surbiton, Morton Swifts, Brentford, Mortlake, Putney, Wandsworth and Battersea, and swords from such places as Cowey Stakes and Blackfriars. The later Saxon eras are represented by many more weapons, spear-heads being comparatively common in most reaches, along with numerous examples of the *scramasax*,

the famous, single-edged slashing sword that was so characteristic of the Saxons.

It would, however, be quite wrong to take the preponderance of war-like relics to mean that the river banks were nothing more useful than a battleground for all and sundry. We have only to trace the origins of such place-names as Goring (*Garinges*, people of *Gara*), Sonning (*Sunningas*, people of *Sunna*) or Reading (*Readingum*, *Reddinges* or *Readingas*, the people of *Read* or *Reada*) to be reminded of their early inception. Although few settlement sites have been discovered, cemeteries and isolated burials string out along both banks of the river. Below London we have the famous cremation cemetery at Northfleet, and above it cemeteries at such places as Shepperton, Reading, Goring, Wallingford, Sutton Courtenay and more than a dozen others. Looking at a map of the sites one notices a striking dearth between Chertsey and Reading, an area which, north of the river, was then known as the "Deserts of Chiltern". It was rough, difficult country, coated with a tangled fur of undergrowth, inhabited only by outlaws and brigands who lived there in comparative security. Such a district had little to commend it to the prospective settler, and so it is not until we reach the Goring Gap and the fertile valley of the Windrush, Thame and Cherwell, the rich farmlands of the West Saxons, that we find a generous sprinkling of cemeteries both large and small. But even in these upper reaches the principal finds from the Thames are still of a military nature. It is true that the later years are represented also by isolated examples of domestic pottery, yet at best they are but a tantalizing glimpse of what we should expect to find.

While the river must inevitably have played an important, even momentous, rôle in the story of early Saxon England, the details were not recorded and will never now be known. We have no reliable histories, no carefully excavated archaeological data, and from the river itself little save rusted and

broken weapons. But as we come to the later phases of the Saxon era, a faint glimmer of light appears at the end of the tunnel and, although still far off, the darkness begins to pale. London has reappeared as Bede's "mart of many nations" and the river has again taken its place as the haven of foreign shipping. The city was minting its own coins, and certain parallels between these London *sceattas* and the late Romano-British coinage are thought to indicate an unbroken link between the London of the fifth and seventh centuries. But be this as it may, there can be no doubt that once the Saxons were established, London's position as a trading centre began to improve, even though politically its future remained uncertain. The overlordship of the East Saxons passed successively from Kent to Wessex, to Northumbria, to Mercia, then to Wessex again and finally back to Mercia, where it remained until 827, when all the Saxon kingdoms were united under Egbert, king of Wessex. All this must have been most disturbing for the inhabitants, but less so than the unpleasant advent of the Viking pirates whose activities on the Thames must have been even more troublesome than the Saxons had been to the latter-day Roman citizens.

From the late eighth century until the Norman Conquest of 1066 Britain suffered continuously from the ravages of Scandinavian raiders, and London proved to be no exception. Time and again the city was overwhelmed by first one enemy and then another. In about 841 the *Saxon Chronicle* states that there was "great slaughter in London", and then, ten or twelve years later, there "came three hundred and fifty ships to the mouth of the Thames, and the crews landed and took Canterbury and London by storm". It was soon after this that bands of Viking raiders began to settle in the South East, and there seems little doubt that they were soon in complete command of the lower Thames. In 893 a large force of Danes, complete with cavalry, crossed into Kent, while a fleet of some eighty ships appeared in the mouth of

the Thames. Our own king Alfred, who is thought to have been the greatest military leader that the Scandinavian attackers ever had to contend with in western Europe, sent reinforcements to the citizens of London who sallied forth to oppose the invaders. They were lucky enough to be able to surprise the Danish camp, loot it and carry the spoils back to London without undue losses to themselves.

Although the burning, looting, coming and going continued with varying intensity throughout the tenth century, the rôle of the river was purely repetitive, each scuffle depositing a few more weapons in the water but none of them adding much to the story of the Thames. But towards the end of the century the tempo of events increased. In 982 London was yet again put to the fire, and in 994 the Danes under Sweyn, their leader, once more descended on the city in a fleet of ninety-four ships, but, surprisingly, were repulsed by the inhabitants. It is slightly ironic, perhaps, that less than twenty years later Londoners should open their gates to Sweyn without raising a stick or stone to oppose him. The English king, Ethelred, fled to Flanders and remained there until Sweyn's death, whereupon he returned to recover London in the most stirring and exciting battle that ever coloured the Thames.

Aided by Olaf of Norway, Ethelred sailed up the river only to find that London Bridge was so heavily defended by the Danes that they could not approach it, nor could they bypass it on the south, for the defenders were equally well established in Southwark. The *Saga of St. Olaf*, which records this battle in considerable, if apocryphal, detail, tells how the attackers were initially repulsed.

"As the host came near the bridge they were shot at, and such large stones thrown down on them that neither their helmets nor shields could withstand them; and the ships themselves were greatly damaged, and many retreated."

The bridge, it seems, was a strong, wooden structure resting on piles driven into the river-bed and broad enough for carts to pass one another. The sides were reinforced with bulwarks that effectively protected the defenders, and, all in all, the Danes appeared to be in a very strong position. But Olaf, who was a much better commander than his partner Ethelred, was not easily deterred. He called on the fleet to withdraw to a safe distance, covered them with protective hurdles and once more rowed up to the bridge. Again the Danes hurled down every available missile, but this time most of them bounced harmlessly off the hurdles. Olaf's ships reached the bridge without undue damage, nestled in the lee of it for a short time and then began to row away as fast as oars would propel them.

One can well imagine the jubilation of the defenders when they saw Olaf apparently in flight. But their joy must have rapidly turned to dismay when they discovered that the departing ships were towing the bridge behind them. One by one, as the tow-lines tautened, the piles were wrenched from the river-bed, and slowly, and with infinite grace, London Bridge collapsed into the Thames. With Southwark successfully isolated, and quickly overrun, London perceiving which way the wind blew surrendered and received Ethelred as king.

Some years later a rebuilt London Bridge was again to play an important part in the defence of the city. Shortly after Ethelred's death the Danes attacked London and this time the boot was on the other foot, for, although the bridge was defended, Southwark was less firmly held, with the result that the attackers were able to dig a canal and drag their ships along it past the bridge and refloat them upstream. But although the Danes laid siege to London and later carried out a combined assault from the land and from the river, the City stood firm. The authenticity of this Danish canal-digging exploit has sometimes been questioned. It is therefore interesting to note the discovery by the Ministry of

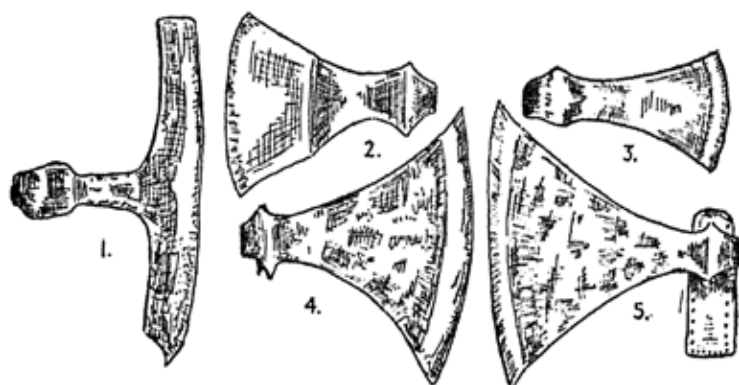
Works of a comparable Saxon canal that by-passed a loop of the Thames near Windsor. Excavations carried out in 1955 not only exposed the cutting but also revealed the timber foundations of a bridge that spanned it.

It was during one of the London Bridge encounters that a most interesting group of weapons and tools was lost into the river, to be recovered nine hundred years later. The finds were made by workmen digging on the foreshore near the modern bridge and included seven battle-axes, a woodman's axe, a pair of iron tongs, a grappling-iron and six spear-heads. The grappling-iron, with its four prongs and ring for attachment to a rope, is a typical item of a Viking warship's equipment, while the shapes and decoration of the weapons can be paralleled in Norway and date them to the late tenth or early eleventh century.

One of the axe-heads still retains traces of the wooden shaft, while two others possess ornamental brass sockets which suggest that the wood was intact when first discovered, but being waterlogged this may have fallen to pieces when moved by the unskilled workmen. A seventeenth-century axe (Pl. XXX) found by the writer on the Queenhithe foreshore retained a complete, though waterlogged, handle which has now been treated and preserved. While it is true that there is a considerable difference in time between the seventeenth and tenth centuries, there is no reason for water-soaked wood to decay any further, providing it is securely encased in the river silt. This fact has been demonstrated time and again by wooden objects preserved in the Walbrook, and by a Late Bronze Age socketed axe from Kew Bridge which was found with most of its handle intact and given to King Edward VII.

The axes are undoubtedly the most impressive objects from the London Bridge group, for they possess a grace of line that was neither surpassed nor equalled in the years to come. But the palm for being the most decorative find goes

to one of the spear-heads which is inlaid in silver with an elaborate "Ringerike" decoration that clearly proclaims its Nordic origin. Their possible association with recorded history gives these finds a romantic interest unequalled by any other Viking or Saxon relics from the Thames. But it does not follow that each individual item is necessarily superior to other river finds. One of the two axes with the ornamental sockets is almost exactly paralleled by an example from Chelsea, while most of the spear-heads have



19. Axes of the Viking era: 1, Frankish type, ninth century, Brentford; 2, tenth century, Kew; 3, tenth century, Thames Street, London; 4-5, eleventh century, off Tower of London and from Chelsea, the latter with brass socket. 1, 3-5, *London Mus.* ($\frac{1}{2}$)

been duplicated in other stretches of the river. Nevertheless the presence of unstratified parallels cannot in any way detract from the interest and importance of the London Bridge group.

Battle-axes of one sort or another are more common from the Viking era than from any other period in our history, and the Thames was not slow to take its toll of these weapons. Most of them are so distinctively shaped that they can be

easily and closely dated; some being the epitome of what we would expect a battle-axe to look like, being roughly triangular with a long and vicious cutting-edge, while others are curious "T"-shaped weapons with long, narrow blades and ridiculously elongated shanks (Fig. 19). The distribution of both types is extremely wide, the triangular axes being found at such places as Strand-on-the-Green, Barnes, Putney, Chelsea, Battersea, Whitehall, Somerset House, opposite the Tower of London and at Carron's Wharf; and the "T" axes at Basildon, Sunbury, Walthamstow and Brentford.

It would be quite wrong to infer that Viking weapons from the river are confined almost entirely to axes of various forms. The distribution of spear-heads could, for example, be traced out like that of the axe, but catalogues quickly become tiresome and in this context serve no useful purpose. Swords, too, are not uncommon in the Thames and are scattered as far apart as Walingford, Runnymede and Waterloo Bridge. Unfortunately, most of them are badly damaged, having lost either their hilts or sections of their blades. As luck would have it, the best of the surviving examples are scattered far

and wide, one being in Carlisle Museum, another in Toronto (Fig. 20) and yet another in Rome. This last is said to have been found in the Lea, as was another example now in the British Museum. These Lea finds can, like the Bridge group, be tentatively associated with historical events, for it is known that in 896 the Danes built a substantial camp beside the tributary some twenty miles from



20. Vikingsword with guard and pommel inlaid in gold and silver. From Vauxhall Bridge. Tenth to eleventh century. *Royal Ontario Museum of Archaeology, Toronto.* ($\frac{1}{2}$ s)

London, thus providing a base for their attacks on the City. The Londoners, aided by the reinforcements sent by Alfred, endeavoured to dislodge the Danes without much success. Some months later, however, they tried a new tactic and built forts of their own at the mouth of the Lea and so bottled up the Danish ships, which were abandoned to the Londoners along with their stronghold. The Danish army then withdrew overland, leaving London in comparative peace for nearly a hundred years. The two Lea swords were found between Enfield and Edmonton, and from their date could well be relics of a clash between Londoners and the Danes at the end of the ninth century. It is certainly tempting to associate them with the stirring events of 896.

One other sword is worthy of comment, not only by reason of its condition but because it provides an example of the unbelievable coincidences that sometimes surround the discovery of antiquities in the Thames. A labourer who was out on strike decided that he could pleasantly and even profitably while away the time by searching the river-bed for relics that he could sell to G. F. Lawrence. As he approached Putney Railway Bridge he spotted a sword protruding from the mud, and after cleaning his find he saw that it was complete save for the loss of eight or nine inches from the end of the blade. A year later dredging operations in Wandsworth Reach, half a mile or so from the site of the first discovery, resulted in the recovery of the point and lower nine inches of the blade from a Viking sword. This find also passed into the hands of Lawrence, who immediately recognized it as the missing portion of the Putney sword. The two finds are now reunited in the London Museum to prove that every now and then the million to one chance can come off.

Inlaid decoration in brass, silver or gold was extremely popular among the Nordic peoples, and much of the work was executed with surprising delicacy. An interesting example of the use of brass inlay is provided by the discovery of a

decorated iron stirrup from the river near the Tower of London. The find could, perhaps, be a relic from one of the occasions when the Danes shipped their cavalry to the very gates of London before disembarking. Remembering the shallow draught of the ships, it is hard to realize that they carried horses and riders safely across the North Sea. However, we have only to look at some of the scenes portrayed in the Bayeux Tapestry to see that they could and did do so. Another stirrup has been found in the Thames at Battersea, two others at unspecified points and two more in the Cherwell at Oxford. All five could well be relics of unsuccessful attempts to ford the rivers, the horses stumbling, breaking their girth straps and loosing their saddles into the waters. There are, of course, many other possibilities, and it remains for each of us to draw his own conclusions.

The majority of Saxon and Viking relics from the Thames have found their way into the London Museum. The Guildhall Museum, however, possesses a small representative collection in which are two objects of considerable interest. The most important is a cheek-piece from an elaborate bronze bit (Fig. 21) that probably dates from the eleventh century. The circumstances of this discovery are not recorded; but the second object is known to have been picked up on the foreshore near Southwark Bridge. This is a fragment from a remarkable bone drinking-horn (Fig. 22) decorated with bands of incised circles and, like the already mentioned bit, it is unique from the river.

The blood-drenched history of Saxon and Viking London tends to obscure the purely civil occurrences that made up the story of everyday life in those uncertain times. One such



21. Cheek-piece from late Saxon bronze bit. *Guildhall Mus.* ($\frac{1}{2}$)

happening cannot go unmentioned even though, as far as one can tell, it left no treasure in the Thames. At some time towards the end of the tenth century a woman was arrested for witchcraft. She was accused of preparing a wooden image of a man named Ailsí and hammering nails into it in the hope that he would die. This is a simple and well-known form of malignant magic that has continued with little change almost to the present day (see p. 196). We do not know whether Ailsí did in fact die as a result of the witch's attentions, for



(17)

22. Fragment of Saxon drinking-horn. From fore-shore near South-wark Bridge. Guildhall Mus.

her arrest was occasioned by the discovery of the wooden image in her house. Both the woman and her son were seized, tried, found guilty and condemned to death. Although the son escaped, his mother was less fortunate. She was taken to the middle of London Bridge, heavily weighted and thrown screaming into the river. Neither the story of the woman's crime nor the method of her execution is particularly notable. Their importance lies simply in the fact that the record of the event, set down in the *Codex Diplomaticus*, provides the first occasion on which "London Bridge" is mentioned by name.

There are many stories of London and the river, but few can be more remarkable than the account of the abduction of an archbishop's coffin from St. Paul's Cathedral. This came about in the following manner. In 1017 London was in the hands of Canute, the son and successor of Sweyn, who had filled the City with Danish troops and who now, according to their song of victory, were happy to "sit merrily in fair London". The citizens, on the other hand, were neither happy nor merry, and were ever ready to thwart the Danes when opportunities arose. Some five years previously the

Danes had killed the popular Archbishop Elfey, whose body had been purchased by the Londoners and interred with great reverence in St. Paul's Cathedral. But soon after the accession of Canute, Elfey's successor, Archbishop Agelnoth, sent missives to the king requesting that the martyr's body should be returned to the monks of Canterbury. Regardless of the fact that the Londoners would be bound to resist any attempt to move the coffin, Canute gave his consent to the proposition. He arranged that the body should be smuggled out of London while the citizens' attention was held by a series of diversions. Groups of Danish soldiers were dispatched to the bridge and to most of the City gates where, at a pre-arranged signal, they instigated a general free-for-all. Meanwhile, having bribed the custodians, the coffin was extracted from the Cathedral and hurried to a quay where a boat lay in readiness. So anxious was Canute to avoid a hitch that he himself attended at the river's edge to see the coffin safely on its way. But no sooner was the body aboard than the king's presence aroused the very attention that he was so eager to avoid. However, the boat had a fair start before the citizens realized what had happened and, although scores of craft set out in pursuit, it made good its escape. The body of the martyr was handed over to the monks who were waiting at the rendezvous, whereupon the boat continued down-stream until overtaken by its pursuers who still believed the coffin to be aboard. By the time that they discovered their mistake, it was far too late, and the body was safely on its way to Canterbury.

Unfortunately, it is well-nigh impossible to know how many of the Viking stories are fact and how many fiction. Accuracy was never the Saxon historian's strong suite, and the archaeological evidence is virtually non-existent. It was an age of bloodshed, and in keeping with that background the Thames is littered with the panoply of war. It would seem to have little else to offer.

The Middle Ages

THE date 1066 is one that is never forgotten. History books start new chapters with it, a holiday resort trades on it, and both a book and a theatrical entertainment have used it to gain immortality. So accustomed are we to the sound of this date that we may be tricked into believing that life in England suffered a complete change as a result of the Battle of Hastings. But if we stop to think about it, we soon find that nothing was further from the truth. The Norman Conquest was really only the last of the long series of small invasions that littered the pages of Saxon history.

The advent of William, Duke of Normandy, naturally made a political difference to London, but the change of ruler had little effect on the ordinary lives of its citizens. When we abandon a Socialist for a Conservative government the effects are not at first apparent. We do not immediately rush forth and throw our tea-pots in the river vowing that in future we will drink only beer with our breakfast. No more did the Londoner change the style of his hat or the shape and colour of his household goods simply because another foreign invader had seized the throne. From an archaeological point of view, the great events of 1066 have left no traces in the soil of London or in the bed of the Thames.

William found a London filled with civic pride, glorying in its independence and understandably satisfied with its achievements. The Conqueror was no fool and treated the

City with a healthy respect. No attempt was made to take it by force, and we can see from the charter that was granted after its submission that William was eager to be on good terms with its spirited citizens.

"I give you to know", he wrote, "that I will ye both be worthy of all those laws that ye were worthy of in King Edward's day. And I will that every child be his father's heir after his father's day, and I will not suffer that any man offer you any wrong. God keep you."

The City was then given the king's authority to govern itself under the authority of the bishop and the secular jurisdiction of the portreeve—an office later superseded by the election of a mayor.

Although London was once more a flourishing port to which merchants of every nation "rejoice to bring their trade in ships", the City was unlikely to have been a place of beauty. It lay huddled within its Roman walls, dotted with numerous well-built stone churches and dominated, as it is today, by St. Paul's Cathedral. But the houses of the citizens were often poor things built largely of wood and clay daub. The remains of these early secular buildings are rarely found, and when they do appear they consist largely of burnt daub with charred puddled clay floors—the débris from one or other of the numerous fires that swept the City at that time. Most of the houses were roofed with thatch, and it needed only one to ignite for the flames to leap like sprites from roof to roof. It was during one such fire in 1087 that most of London was destroyed. But although St. Paul's itself was lost in the conflagration, the fire served to erase much that was squalid and unworthy of a great and growing city. Here was an opportunity to start afresh. But if the early mediaeval Londoners made no better use of it than did their successors after the fires of 1666 and 1940, then in all probability the chance was lost.

It was during the Middle Ages that riverside London began to change its face, for during that period wharves were thrusting ever farther into the stream. Behind them came the buildings, each succeeding structure being built a foot or two closer to the water than its predecessor. Soon the line of Thames Street ceased to mark the southern extremity of the City, houses and warehouses having sprung up beyond it. Although all traces of these buildings have long since vanished, the narrow cobbled alleys and lanes that ran between them still survive. So used are we to broad roads and wide pavements that a Sunday morning stroll down deserted Thames Street can transport us into another age. Here and there among the great warehouses we can find an alley where eighteenth-century houses lean out across the cobbles as though congratulating each other on their survival. It is here that we can gain some idea of a London in which there were no pavements, where all streets were cobbled, and where you could shake hands across the alley with your neighbour without leaving your bedroom. Many of the property boundaries have not changed since the Middle Ages, and the names of the alleys were known to the Londoners of six or seven centuries ago. Puddle Dock, Duck's Foot Lane, Trig Lane, Broken Wharf, Stew Lane and Three Cranes Wharf are just a few that catch the eye.

The historic Queenhithe Dock remains as a memory of days when ships of a very different shape made their way up the Thames to unload their cargoes at London. First mentioned in a charter of Alfred the Great, Queenhithe shared with Billingsgate the honour of being London's premier dock. In the twelfth century it belonged to Queen Adelaide, wife of Henry I, and in the mid-thirteenth it was leased by the Earl of Cornwall to the citizens of London. It was then laid down that corn and fish should be landed at Queenhithe and nowhere else. But as ships grew larger it became increasingly difficult for them to pass London Bridge, with the result that

Queenhithe suffered a decline from which it has never recovered. It is therefore strange that Billingsgate Dock, which retained its usefulness into the early nineteenth century, should have vanished while Queenhithe still remains.

The Queenhithe of today, where on weekdays barges unload their cargoes of meat or furs, and where at week-ends artists set up their easels, is not the dock that the Vikings knew; nor is it the Queenhithe that Queen Adelaide leased to the monks of Reading. The original dock lay closer to Thames Street, probably beneath the present Queenhithe forecourt. This theory is supported by evidence derived from a small excavation carried out to landward and slightly to the west of the present dock. Directly beneath the modern basement foundations (approximately eleven feet below street level) was found a bed of river silt containing layer upon layer of thirteenth-century domestic *débris*, thus proving that the shore-line then lay behind the landward extremity of the present-day Queenhithe Dock. What, we may wonder, can it matter whether a now-vanished dent in the river frontage should have been fifty feet in this direction or twenty in that in relation to an equally unimportant modern dent? To the materialist the answer is undoubtedly—not much. But so far as this book is concerned, it does matter, for it is at Queenhithe that the majority of recent finds has been made.

Two mediaeval feats of building engineering played important parts in the subsequent story of the Thames, and one of them remains virtually intact today. This is, of course, the Tower of London, whose keep was built by order of William the Conqueror. It was destined to provide the setting for many of England's greatest tragedies; and although most of the river associations lead only to Traitors' Gate and Tower Green, some of the Tower's early Thames-side memories are in a lighter vein.

During the reign of Henry I the Royal Menagerie was established at the Tower. It remained there until 1834, when

it was removed to Regent's Park to provide a nucleus for the modern London Zoo. The first acquisitions consisted only of lions, but in 1235 three leopards were added, and shortly afterwards the King of Norway sent a gift of a white bear. The Privy Purse accounts relating to the up-keep of this bear are still in existence, and from them we learn that it was allowed fourpence a day and was provided with a muzzle, an iron chain and "one long and strong cord to hold him when fishing in the river Thames". Some years later King Louis of France presented Henry III with an elephant, which must also have gone down to the river to wash and drink. The unfortunate creature would, therefore, have had the distinction of having been the first to do so since the elephants of Claudius passed that way more than a thousand years before.

Simply because the Tower of London is the only fortress to have survived, we tend to assume that no other ever existed. This is not, in fact, true. The western end of London was protected by a comparable structure known as Baynard's Castle. This building was erected by a nobleman of that name who came over with the Conqueror, and it stood on a site at the corner of what are now Queen Victoria Street and St. Andrew's Hill. After a chequered career it was pulled down and the land granted to the Dominican or Black Friars. A new Baynard's Castle was built close to the river's edge by Paul's Wharf slightly east of the old fortress; and it was here that Edward IV was proclaimed king and that Shakespeare set part of the action of *Richard III*. However, it was neither Baynard's Castle nor the Tower of London which made the greatest difference to the river. That honour belonged, without question, to the stone bridge designed by Peter of Colechurch and which was begun in the year 1176.

The famous Elizabethan topographer, John Stow, recalled having read that "Botolph Wharf was, in the Conqueror's time, at the head of London Bridge". The site is now known



XV. Bronze ritual forceps associated with the Goddess Cybele. From London Bridge. Roman. *Brit. Mus.*

XVII. Fragment of bronze parade helmet. From Southwark. Third century.



XVI. Silver figure of Harpocrates with gold chain. From London Bridge. Roman. *Brit. Mus.*

XVIII. Plaque in form of an altar enamelled in red, blue and green. Roman. *Brit. Mus.*



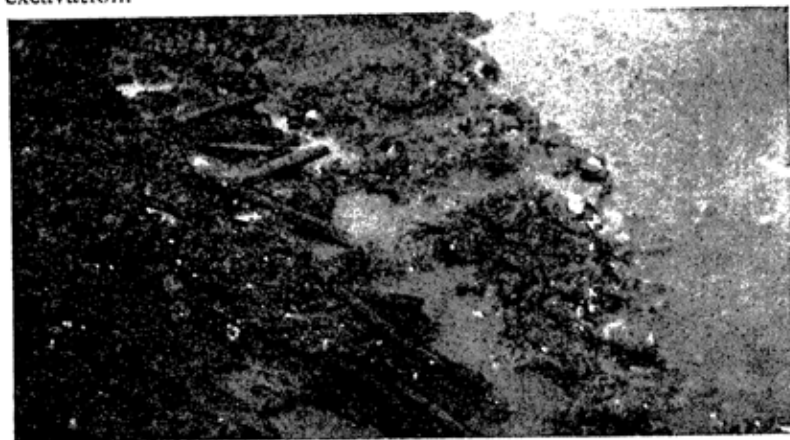
XIX. Wattle floor of Romano-British hut on the foreshore at Brentford. 1928. Photo: H. V. Morton.



XX. Pottery bowl. From occupation level on the Isleworth foreshore. 1955 excavation. Late third to fourth century.



XXI. Wattle floor exposed on the Isleworth foreshore prior to 1955 excavation.



as New Fresh Wharf, and although building excavations have taken place there since the war, no traces of a bridge have come to light. But this does not infer that a bridge never existed on the site.

Although we cannot be certain of the exact position of the last Saxon and earliest mediaeval bridge, we do know that it was built of wood and that it was partially, if not wholly, destroyed by fire in 1163. A new temporary structure was quickly erected, and it was then that plans for a stone bridge were initially put forward. It was the first of its kind to be built in Europe since the hey-day of the Roman Empire. Unfortunately it took so long to build that it could not claim to be the first in service, for the famous bridge at Avignon was completed in 1188 while London Bridge was not opened until 1209. Peter of Colechurch, its architect, died before the work was finished and was buried in the undercroft of the bridge chapel.

What we now remember as "Old" London Bridge survived for just over six hundred years, but how it managed to do so was a never-ending source of wonderment to each succeeding generation. Houses would seem to have been erected on it from the earliest days, and these may have provided the tinder for the fire that swept it only three or four years after its completion. Had the bridge been a simple structure it would doubtless have lived a far less eventful life. But as it was, the weight of the buildings topping it proved too heavy and so caused frequent subsidences. Most of the houses were used as shops and many dealt in oils and similar combustible materials that tended to ignite all too readily.

The river on the other hand owes much to the buildings on London Bridge, for they provided it with an unrivalled source of petty treasures. Housewives threw their rubbish out of the windows, children lost their toys, and in the gaps between the blocks of houses enemies could be waylaid and

tossed into the river. The terrifying rush of water that swirled and boiled between the arches ensured that none lived to tell the tale. When tides were at their fastest few boats dared to venture through the maelstrom, and of those that did many were smashed to matchwood against the great timber and chalk starlings that protected the foundations.

It is not in any way surprising that the area round the old bridge should always have been a rich source of river treasures. But not the least of the finds have been traces of the bridge itself. In 1921, during the building of Adelaide House which stands directly to the east of the modern bridge, an arch of the ancient structure came to light. It had been left behind from the days when the river reached almost to Thames Street, and so had escaped destruction when Old London Bridge was finally pulled down in the 1830s. At the time, the discovery of the arch was hailed as an important relic of old London, and efforts were made to ensure its preservation in the basement of the new building. But the cost would have amounted to something in the region of seven thousand pounds, and no such sum was forthcoming either from the Corporation of London or from other interested parties. The arch was eventually destroyed, a few fragments from it being lodged in the forecourt of the church of St. Magnus the Martyr, and others being used to adorn the roof-garden of Adelaide House. Many Londoners have been saddened by the City's lack of interest in its fast-vanishing antiquities; but few relics can have been more worthy of their tears than the passing of that last arch of Old London Bridge.

Accounts of remarkably low tides occur all through the river's history, and even quite late in the nineteenth century antiquaries reported having seen traces of one or other of the old bridges. But although today it is sometimes possible to walk dry-shod across more than a third of the bed, modern dredging has ensured that we can rarely set foot on the shore

near London Bridge. To the mudlark this is a bitter blow, for it is the area that should yield the greatest harvest. It is true that an inviting patch of silt does occasionally appear close to the bridge off the Southwark shore, but bitter experience has shown that the apparently firm ground is nothing but a snare and a delusion. However, this has not always been so. In the year 1114, for example, the tide ebbed so far "that between the Tower of London and the bridge, and under the bridge, not only with horses, but also a great number of men, women and children did wade over on foot".

Unfortunately there are all too few accounts of early mediaeval London and its river, and were it not for the efforts of one William Fitzstephen we should be almost entirely without documentary evidence. Fitzstephen spent most of his career in the service of Thomas à Becket, and was actually present at his murder. He later wrote a biography of Becket and prefaced it with "a description of the most noble City of London". At one point he enters into the modern controversy of whether there was or was not a Roman river-side wall, saying:

"London was walled and towered in like manner on the south, but the great fish-bearing Thames river which there glides, with ebb and flow from the sea, by course of time has washed against, loosened, and thrown down those walls."

It is, of course, a comment that need not be taken too seriously, for Fitzstephen has, elsewhere, shown himself to be a little shaky in his knowledge of early London history. But when discussing his own times he clearly knew what he was writing about. It is unfortunate that only one passage concerns the river. It does, however, provide an admirable description of the way in which Londoners used the Thames as a place of entertainment.

"In Easter holidays," he wrote, "they fight battles on the water; a shield is hung upon a pole, fixed in the midst of the stream, a boat is prepared without oars, to be carried by violence of the water, and in the fore part thereof standeth a young man, ready to give charge upon the shield with his lance. If so be he breaketh his lance against the shield, and doth not fall, he is thought to have performed a worthy deed. If so be, without breaking his lance, he runneth strongly against the shield, down he falleth into the water, for the boat is violently forced with the tide. But on each side of the shield ride two boats, furnished with young men, which recover him that falleth as soon as they may. Upon the bridge, wharfs, and houses, by the river's side, stand great numbers to see and laugh thereat."

We can well imagine the spectators jostling each other in their eagerness to gain a better view, some hurling their caps in the air and shouting with delight when their favourite shatters his lance, or yelling expressive London oaths when he misses. It seems more or less inevitable that when a crowd gathers near water, someone always ends up in it. The same must surely have been the case way back in the twelfth century when excited spectators fell or were pushed into the Thames. In their efforts to climb out they may well have lost their coats, hats or purses, all of which would have been hungrily swallowed by the river.

All through London's mediaeval and later history we find records of people being immersed for one reason or another in the Thames' indescribably dirty waters. A typical case was that of John Farnham who, on 15th September, 1367, boarded a boat lying at Botolph's Wharf which would carry him to the village of North Wokington. It was dusk when he stepped on to the vessel, and as it could not cast off until the tide rose he and his fellow passengers lay down and slept.

But before they were due to depart a gale blew up and the boat overturned. Farnham was thrown into the water and drowned. The *Calender of Coroners' Rolls*, in which this event is recorded, goes on to say that: "His corpse was carried hither and thither until Wednesday after the Feast of St. Michael, when it was found cast by the waters in the Fleet, at Limehouse." Although the topography of the record would seem to be at fault, the fact remains that the body was lying in the river for three weeks before anyone bothered to bring it ashore. But the thick-skinned citizens of those days were not worried by such things, for lives were held more cheaply than they are today.

It would be grossly unfair to assume that no one bothered about the unpleasant state of the river or the filth that lay rotting on the foreshore. In 1357, for example, the king sent an order to the mayor and sheriffs demanding that they should tidy the river forthwith. "When passing along the water of Thames," he wrote, "we have beheld dung and lay-stalls and other filth accumulated in divers places and have also perceived the fumes and other abominable stenchs arising therefrom. . . ." The directive was so firmly worded that there must have been a veritable surge of sweepers and white-washers to the fore. It is equally certain that no sooner had the waterfront undergone this unheard-of transformation than at dead of night first one housewife, and then another, began to tip surreptitious buckets of night-soil on to the cleaned foreshore. Each must have thought to herself that no one would notice just one bucket, and, besides, the rising tide would clear it away by the morning.

Curious as it may seem, it was only three years later that complaints were being uttered not because filth continued to be thrown into the river but because facilities for doing so were impaired. It was said that: "The possessors of the Temple were wont and by right ought to maintain a bridge at the water aforesaid and a common latrine there, well

covered and with four apertures therein over the same water." It should be explained that the word bridge was used until the nineteenth century to mean also a pier or jetty. Thus we find frequent references to Westminster Bridge, Vauxhall Bridge and, in this case, Temple Bridge.

In 1372 the mayor sent forth a proclamation saying that: "No one by night or day, secretly or openly, should place rubbish, dung, etc., in the water of the Thames or the City ditches . . . that no one cast water or anything else out of the window . . . under penalty of paying two shillings for default." While these records paint a somewhat unsavoury picture of mediaeval London and its hygiene, we cannot ignore the other side of the picture. The citizens had to dispose of their refuse, yet they had nowhere but the household cesspits in which to throw it, and these were filled all too quickly. So pressing was this problem that some Londoners were not averse from a little sharp practice in their methods of "losing" their rubbish. In 1385, for example, another proclamation threatened a fine of four shillings for anyone caught placing his refuse in front of his neighbour's door!

There is little doubt that London stank to high heaven, but, as always happens, having lived amid the smells from birth the worthy citizens learnt to accept the effluvia, so that eventually their noses failed to detect them. To the mediaeval Londoner this nasal tolerance must have been one of nature's most valuable gifts. One of the strangest aspects of the whole dirty business was the fact that the river was still fished for its salmon. Today we should probably think twice about eating a fish caught off London Bridge—always supposing of course that a fish could be found there. It was considered quite normal practice for the women of mediaeval London to empty their refuse into the river, then wash their clothes in the water and finally carry home a bucketful for cooking purposes. The principal sources of clean water came from the conduits, but there were still water-carriers who were

allowed to draw their supplies from the river at Dowgate and sell it to the populace. Strange as it may seem, the carriers continued to ply their trade well through the eighteenth century, thus supplying the poorer classes who *preferred* river water. Hence the carriers' cry, "Fresh and fair new River-water! None of your pipe sludge!"

The principal changes that came to the river during the Middle Ages were occasioned by the rapid growth of trade, and in later years by the equally rapid expansion of London and the Thames-side villages. Revetments were constantly thrusting farther into the stream, making the channel deeper and less broad. In about 1500 an Italian visitor to London was amazed by its prosperity and noted that vessels of a hundred tons were able to sail up to the City, while even those of the largest tonnage could reach within five miles of it.

Londoners had always appreciated their debt to the river, but it was not until the fifteenth century that they began to make use of it in the manner it deserved. The Thames had always been used as a simple route from the point "A" to the point "B", but the ever-increasing congestion in the City now caused it to be used to carry royal or civic processions that could no longer move freely through the streets. In 1452 Sir John Norman was the first Lord Mayor to process from the City to Westminster by water.

When in 1215 King John granted the City its mayor, it was stipulated that each succeeding officer should be presented at Westminster by the citizens for the approval of the king or, in his absence, the Barons of the Exchequer. The new mayor, accompanied by the City Companies, travelled in full civic pomp, and it is this event that has come down to us as the Lord Mayor's Show. The gradual embellishing of the procession resulted in an annual pageant of such magnificence that it had the greatest difficulty in making its way through the streets. It was for this reason that Sir John Norman caused an elaborate barge to be built at his own

expense to carry him up-river to Westminster. The City Companies welcomed the idea, and they too built their own barges, thus beginning a succession of Lord Mayor's processions each of which endeavoured to surpass its predecessor in pomp and magnificence. It became an annual event which survived until 1856; and although the Show is no longer water-borne, two notable river pageants have taken place since that date. The first was the Victory Pageant of 1919, which was honoured by the presence of their late Majesties King George V and Queen Mary, while the second was organized in 1953 by Sir Rupert de la Bere, who was then Lord Mayor. It was hoped that his great enthusiasm for the river and its history would mark the awakening of a tradition that has slept too long. But although Londoners turned out in their thousands to enjoy the spectacle, succeeding Lord Mayors have shown no further interest in their river.

Sir John Norman's procession met with an enthusiastic reception, and it quickly became fashionable for anyone who was anyone to process up and down the river. The Thames watermen were so delighted to receive Sir John's patronage that they composed a ballad in honour of him which began: "Row thy boat, Norman . . ."

The river's new-found popularity inevitably had a bearing on the antiquities that have subsequently been found in it, for increased traffic produced a higher accident rate. But although the new trend began in the latter half of the fifteenth century, the hey-day of river travel was to last through the two succeeding centuries. In this chapter we are concerned with treasures that the Thames claimed before that time, and so we must retrace our steps over the four hundred years that we know as the Middle Ages, a period of time longer than the years that have passed since the reign of our first Queen Elizabeth.

The river's mediaeval treasures tend to ape those of the

Saxon and Viking eras, being confined largely to weapons and the trappings of war. We start, of course, with the inevitable array of swords from such places as Medmenham, Sion Reach, Putney, Wandsworth, Westminster, the Temple and Blackfriars. Many of them are in a remarkable state of preservation and some are as pliable in the blade as on the day they were made. It is difficult to single out any one example as being the finest. But if we have to choose, then the distinction should go to a magnificent double-handed weapon which was found in 1850 in the river opposite Temple Gardens (Pl. XXIX). Even those of us who have no possible interest in mediaeval arms and armour must be impressed by this great sword. The blade is no less than three feet three inches in length, and from tip to pommel measures four feet two inches. The blade is inlaid with a small brass dagger, the mark of the armourer, and on the wheel pommel there is an inlaid cross suggesting that this fourteenth-century weapon may have belonged to one of the Knights Templars. The sword is one of the treasures of the Guildhall Museum, but it is not the largest to have been found in the river. That distinction belongs to a "hand-and-a-half" sword from Sion Reach which is now in the London Museum. Although complete, and a little over five inches longer than the Temple example, the Sion Reach sword lacks its massive simplicity. But one cannot fairly compare the two, for the Sion Reach weapon is later in date, belonging to the mid-fifteenth century when sophistication was becoming the order of the day.

The London Museum undoubtedly owns the finest collection of mediaeval swords from the Thames, while others are in the British Museum and in the Tower of London. But two important swords from Westminster are preserved in less likely places, one belonging to the Society of Antiquaries and the other to the Royal United Services Institution. The latter is notable in that it remains in its scabbard, for although the wood and leather have long since rotted away, the

splendidly engraved mounts and chape are still in position.

While mediaeval swords from the Thames are reasonably plentiful, there are a great many more daggers, basilards and knives of one sort or another. Most of these have been retrieved not from the bed of the modern river but from building excavations on the banks, notably from sites in Thames Street. A remarkable number have been found at Brook's Wharf and in Old Swan Lane, while there are others from Broken Wharf, Carron's Wharf, Dowgate, Fresh Wharf, Kennard's Wharf, Queenhithe, the Steelyard and from Three Cranes Wharf. Most of these are of fourteenth- or fifteenth-century date. No one has yet produced a satisfactory explanation of how so many daggers came to be in the river silt, and as most of them were found during the nineteenth century we have no details of the circumstances of their discovery.

Here again the problem of the river frontage arises. Were the weapons lost or thrown away when the tide-line reached closer to Thames Street, or at some later date when buildings already covered the silt in which they lay? If the latter is the case, we could assume that they were thrown into rubbish pits or fell beneath houses that were partially raised on piles over the river. The evidence for and against is never decisive but always contradictory. In 1384, for example, a building lease for a site at Pakenham's Wharf, near the Custom House, instructed the builder to enlarge "in the direction of the Thames, the said wharf by eighty feet, the wall to be of Maidstone stone . . .". One might suppose that an encroachment of eighty feet would carry the property almost to the modern river frontage. Yet the post-war building excavations at nearby New Fresh Wharf revealed layers of silt containing quantities of fifteenth-century potsherds that stretched well towards the road. This state of affairs might be accounted for by the presence of buildings raised on piles. But unfortunately the suggestion is not supported by the

evidence. The reference to a wall of Maidstone stone indicates a very much more substantial frontage, and the earliest drawings of this stretch of the river show an unbroken line of stone-walled buildings rising out of the water. We can only hope that an answer to the problem will be gained when the many blitzed warehouses are rebuilt.

The numismatist who hopes to find mediaeval coins in the Thames is doomed to feel inordinately thwarted, for they are few and far between. English mediaeval coins were either of silver or gold, the latter being so valuable that their owners made strenuous efforts to avoid leaving them in the river. Silver pennies, half-pennies and farthings are occasionally found, but they are generally in so poor a condition that they are of little interest. The hammered silver coins are so thin and struck in such low relief that their sojourn in the river usually removes the design and even causes holes to appear. Many examples had been vigorously clipped (p 235) before reaching the river and so, all in all, few mediaeval coins have much to commend them. Most of those that have been found have been recovered by mudlarks rather than by dredging, for they are the most difficult objects to recognize. Many of them are coated with a thick, black, sandy deposit that even hides their tell-tale circular shape, giving them instead the appearance of stained, sandstone chips.

When discussing mudlarking it is inevitable that one must write from one's own experience, for there is no knowing how many examples of various things have been found by the many individuals who pass a gentle hour on the shore. I can therefore only recall that from the two hundred and fifty coins that I have recovered, only nine can be dated between 1066 and 1485, and only three are in anything approaching a reasonable state of preservation.

The small relics of the early Middle Ages are equally hard to find, and once discovered they remain extraordinarily difficult to date with accuracy. Various small fittings—buckles

(Pl. XXVI), sword chapes, ornamental hinges, box mountings and so on have all been found from time to time, but few can be dated within a century. Yet comparable objects from the Roman era can generally be pinned down to within fifty years or so. This curious anomaly may tend to puzzle the layman. How, he must wonder, can the pundits date relics that are nearly two thousand years old to within half a century, while other finds that are less than half that age can only be vaguely dated to a hundred and fifty or even two hundred years? He would naturally expect that the nearer we come to our own times the closer our dating would be. The fact that this is not the case is largely due to the archaeologists of the past who have studiously ignored our mediaeval and later antiquities. A vast quantity of information has been amassed concerning Roman Britain, while our appreciation of later relics still remains in the teething stage. Any suggestion that the older school of archaeologists should have devoted their activities to mediaeval sites would have been greeted with erudite scorn—the same scorn that is thrown today on those of us who are foolish enough to study the archaeology of the seventeenth and eighteenth centuries.

It would be wrong to assume that all mediaeval antiquities from the Thames are shrouded in mystery. Some can be dated fairly closely and even have a coherent story to tell. Under this heading comes an extremely interesting group of leaden objects that are loosely known as “pilgrim-signs”. To most of us the word pilgrim is irrevocably linked with the name of Geoffrey Chaucer, for there can be few who have not had some contact, however fleeting, with his delightful *Canterbury Tales*. In the Middle Ages pilgrimages were important events in the lives of folk of all classes, and the more devout or adventurous people were the farther they travelled. There were numerous shrines here in Britain, many more on the Continent, and others as far east as the Holy Land itself. In the *Prologue to the Canterbury Tales*

Chaucer tells us that the Wife of Bath had been three times to Jerusalem, to Rome, Boulogne, Galacia and Cologne. But such travelling was beyond most purses and took a long time. However, there were a few who spread their net even wider, and one such pilgrim appears in the *Vision of William concerning Piers the Ploughman* by William Langland. That devout man claimed to have journeyed as far as Bethlehem and Babylon, besides having visited shrines both in Sinai and in Europe. No one could doubt his integrity when he claimed to have travelled so far, for, as he pointed out,

"Ye may se by my signes
That sitten on myn hatte."

He was referring to the pewter signs or badges that each pilgrim bought when he reached the shrine of his choice, and which he wore in his hat, on his cloak, or even hung round his neck. Each sign was moulded in a form symbolic of its particular shrine. The shrine of Our Lady of Boulogne is recalled by a badge showing the Madonna and Child standing in a crescent-shaped boat. Legend had told how the sacred image of the Virgin and Child had appeared off Boulogne in a crewless ship. This particular shrine was one of the most popular among English pilgrims, for it was close enough not to be too costly in time or money to reach, yet sufficiently distant (with a Channel crossing included) to make the journey something of an adventure.

Scores of pilgrim signs have been found in the Thames, the majority of them within a short distance of London Bridge (Pl. XXV). Among the more common are the feather sign of St. Barbara, the wheel of St. Catherine, the scallop-shell of St. James of Compostella, and the rose of St. Dorothy. Others include the sword of St. Paul, the hunting-horn of St. Hubert, St. Richard of Chichester in the act of bestowing a blessing, and the flowering heart of St. Joseph of Arimathea. Those of us who have occasion to study the badges

invariably acquire a favourite, and many people select the sign of Sir John Schorn, who was vicar of North Marston, Buckinghamshire, in about 1270. That magnificently Shavian character accomplished the amazing feat of conjuring the devil into a boot. Many of his signs therefore show him displaying the boot from which the devil peeps out while he harangues the congregation from his pulpit.

Inevitably the most frequently discovered signs from the Thames are those of St. Thomas of Canterbury. Thanks to Chaucer we know more of this pilgrimage than of any other. Not only was it a solemn religious event in the lives of the travellers, it also provided an excellent holiday and an opportunity to have a good time and to make new friends. The atmosphere of levity that surrounds Chaucer's merry band led some sober men to criticize their "veyne pilgrim-*agis*". But their frowns had little effect, for the gentle art of pilgrimaging was an inherent part of life in those days. The signs of St. Thomas take various forms and are generally rather larger than those of other saints. Some show a simple, mitred head an inch or more in length, while others depict St. Thomas astride a horse or seated within an elaborate shrine. Another equally common variety is made in the form of a bell, and recalls a well-known contemporary reference which refers somewhat slightly to the pilgrims and "the jangling of their Canterbury bellis . . ."

One of the most vivid of surviving references to the buying of pilgrim-signs comes from the *Prologue to the Tale of Beryn*, which continues the story of Chaucer's pilgrims after they reached Canterbury. This was written rather later, and by a less able hand, yet even in its modernized text the picture is vigorous and very much alive. We are shown how, after wandering around the cathedral, taking in the sights and holding forth eloquently about things of which they knew nothing, the pilgrims settled down to the main purpose of their visit:

"Then on they went boisterously goggling here and there,
Kneeled adown before the shrine, said heartily their prayers,
They prayed to St. Thomas in such wise as they knew,
And then the holy relics, each man kissed them, too,
As from the goodly monk the name of each they learned;
And then to other places of holiness they turned,
And were at their devotions till the service was sung through.
And then as it was near noon, to dinner-ward they drew.
But first, as manner and custom is, pilgrims' signs they bought;
For men from home should know the saint whose shrine they have sought.
Each man laid out his silver on things that he liked best.

Then a few lines later:

They set their tokens on their heads, some on their caps did pin,
And then to the dinner-ward went back to their inn.

We have only to read the *Tale of Beryn* before visiting Canterbury Cathedral to discover how little human nature has changed in five hundred years. Sightseers still air their non-existent knowledge, while the modern pilgrims continue to buy mementoes of their visit to the cathedral and the site of the shrine. The latter was dismantled in 1538, when the gold plating and precious stones were annexed to the treasury of Henry VIII.

There are few relics from the Thames that do not retain some element of mystery, and the pilgrim-signs are no exception. We know from contemporary narratives that the

signs of each pilgrimage were collected and prized, in the same way that some modern travellers take a delight in plastering their luggage with ostentatious labels. It seems strange, therefore, that so many of the badges should have ended their days in the river. The pilgrim gained prestige from his travels, and his signs were the ever-present proof of his journeying. Why, then, should he allow them to be lost into the water?

In attempting to answer this question, it is worth noting that pilgrim-signs have been found in other rivers, both in this country and on the Continent. But although they are plentiful from the Thames, they are rare in the City, save in the dry river silt south of Thames Street. One may well wonder whether these facts are significant. Does it mean that the signs were thrown into the river and nowhere else, or that the river alone has preserved them? The latter suggestion cannot be ignored, for the signs are very thin and the soil beneath London attacks metals with considerable vigour. Lead coffins, for example, that have lain in the ground for less than three hundred years can on occasions be reduced to nothing but powdery lead oxide. If this can happen to thick lead, then paper-thin pewter can vanish without trace. Nevertheless, poorly preserved leaden objects of mediaeval date have been found in the City, thus throwing doubt on the destruction theory.

Returning to the still unexplained reason for the signs being thrown away, we must consider the literary evidence of Chaucer and Langland, which clearly shows that pilgrims did not cast their badges aside when they reached home. We have seen in an earlier chapter how the Romano-British inhabitants of London threw coins from the bridge and how Victorian barge-masters bought wind by the same token. It therefore seems possible that the pilgrim-signs found their way into the Thames in a similar way. Each pilgrim may have bought a number of badges and have thrown one into the

river on his return either for good luck or as a half-understood thank offering for a safe journey.

There is some corroborative evidence for at least part of the theory, for it seems that it was not unknown for pilgrims to buy more than one badge. The *Tale of Beryn* having told how the travellers paid out their silver for their signs, goes on to relate that:

“ . . . in the meanwhile the miller had picked
His bosom full of signs of Canterbury brooches,
Though the pardoner and he privately in their pouches
They put them afterwards that none of them were
lost.”

We need no reminding that the Church played an enormously important part in the lives of all who lived in mediaeval England, or that the break-down of the monastic system played a large part in bringing mediaevalism to an end. Unlike the Battle of Bosworth that heralded the beginning of the Tudor era, the Dissolution of the Monasteries had a direct impact on the lives of ordinary people. While a large section of the populace welcomed the break with Rome, the remainder must have bitterly resented the closing of the monasteries, the dispersal of their libraries and the destruction of shrines and insignia that had been revered through the centuries. What, one might ask, has all this to do with the Thames? The answer is simply that relics and symbols of the Holy Catholic Church suffered the same fate as the temple treasures of Londinium and were cast into the river.

The Guildhall Museum possesses two interesting objects of brass, both of which seem to have been coronets used to adorn the brows of saints. One of these was found at Queenhithe, while the other was excavated at nearby Brook's Wharf—a site that has produced a multitude of other mediaeval antiquities. Both the Guildhall and London

Museums possess a small number of bronze figures, each of which had originally been attached to a crucifix. Although there is no record of where exactly they were found, their state of preservation suggests that they came either from the river or from the City ditch.

Early archaeological publications record the finding of various supposedly religious objects during nineteenth-century Thames-side building excavations. Unfortunately few of these relics can now be traced, and we are left to wonder whether some of them may not have been forgeries. A group of finds from Brook's Wharf which portend to be of the pilgrim-sign variety look very odd in the line-drawings of them, and appear to have features in common with certain classes of fakes that were circulating at that time (p. 236).



23. Wooden reliquary. From London Bridge.
Brit. Mus. ($\frac{1}{3}$)

Of undoubted authenticity is a wooden figure in Benedictine habit which stands some nineteen inches in height and was recovered by Roach Smith from the river at London Bridge (Fig. 23). The figure has a heart-shaped aperture in the breast which must have once held a sacred relic. Roach Smith believed that this reliquary had belonged to the Bridge Chapel, but

while this may have been so there is no evidence one way or the other.

The most important and impressive religious object yet found in the river is without doubt the Guildhall Museum's famous Wapping reliquary (Pl. XXVII). It was found at some little distance from the present frontage in a bed of dry silt which was cut into in 1870 during the construction of a new wharf. No details of the discovery have survived, and we only know that the find was made at a considerable depth in the silt.

The reliquary is of latten, or brass, and represents a life-size male head, hollow inside and attached to shoulders that are rather too small. The head is cast in two pieces which were afterwards brazed together, but is held to the shoulders by rivets. The two parts being a poor fit, extra panels of brass have been added at the junction to seal the gaps. The shoulders terminate in a rolled edge and are pierced by a single small hole at the front and three more at the back, suggesting that the whole thing had been attached to a stand or had been sealed by a base-board. The facial features are striking, but if intended as a reverent portrait it cannot be described as a very flattering effort. The brows protrude like those of an ape, the eyes are wide and staring, and the mouth is unnecessarily thick-lipped.

The problem of whom the Wapping reliquary may represent is still unsolved. It has been described by some as a head of Christ, and by others as any one of various saints. One point at least is certain. The long, flowing hair precludes it from representing one of the many mediaeval saints. The purpose of reliquaries of this type was to contain either a fragment or the whole of the skull of the saint it depicted. Similarly, fragments of the cross were said to be built into elaborately ornamented crucifixes, while other bones of the saints were set inside reliquaries representing the parts of the body from which the pieces came.

The Wapping reliquary, which is known as a *chef*, is the only one of its kind to have been found in this country, and for that reason is an extremely important object. Whether it ever contained a complete skull we shall never know. But even if it did, the chances of its being a genuinely sacred relic are less than slender. Jehan de Mandeville, who compiled a remarkable book of his travels in the fourteenth century, has given us an unconsciously amusing account of the dispersal of the skull of John the Baptist. He tells us that the back of the skull was housed at Constantinople, the front in

Rome and the lower jaw elsewhere. He then goes on to remark that some men consider the entire skull to be at Amiens, but that the genuine one was in reality preserved in the church of St. John the Baptist at Trimmingham in Norfolk. Although it is generally agreed that Jehan de Mandeville was a charlatan, the important factor is not that he was right or wrong in this case, but that his account is typical of the way in which relics were distributed at that time.

The dating of the Wapping reliquary is still in doubt, for some authorities attribute it to the late fifteenth century, while others suggest that it may have belonged to the middle of the sixteenth century. In the first case we can assume that it was thrown away at the time of the Reformation, or in the second that it was imported during the reign of Mary and removed after her death. Its presence in the Wapping silt cannot be explained, but it seems possible that it had been one of the treasures of a nearby religious house. It might perhaps have been salvaged by Catholics who removed the sacred relic for safe-keeping and abandoned the flamboyant casing as being too dangerous to hide, throwing it into one of the many gullies in the Wapping marshes where it was quickly swallowed by the mud. Much of the area was continually subject to inundation by the river, and was not finally reclaimed until 1571. It would therefore have been possible to dispose of the reliquary at any time before that date.

Generally speaking, the Thames' mediaeval relics are less widely distributed than are those of the prehistoric or Saxon eras. Few really important finds have been made outside the London reaches, and most of these hail either from Westminster or from the stretch of river that flows between the Temple and Tower Bridge. There are always notable exceptions, and among these can be named stretches at Kingston, Hammersmith and Battersea. There is, for example, a most interesting ball-shaped lock in the Layton Collection which

was recovered at Chiswick; and in the same collection one finds a small, late fifteenth-century jug from Brentford and a much larger pitcher of the same date from Hammersmith. But on the whole, these are isolated finds and cannot be compared with the quantity of objects both large and small which has turned up at Westminster or on the City shore.

Mudlarking finds of the late mediaeval era are quite common on the City and Southwark foreshores. It is true that they are rarely very impressive, being confined largely to scraps of shattered pottery, yet in their humble way they recall the hey-day of London's civic glory as truly as do the more dramatic objects. Covered with rich green, yellow and brown glazes, the sherds are littered on the shore that has been their home for five centuries. They remain unnoticed, of no significance to archaeologists, and unrecognized by the majority of mudlarks who trample on them in their quest for more spectacular finds. The searchers are invariably hunting for objects of metal, yet when found such things can rarely be classified and dated as readily as the despised potsherd. One can but say of a rusted iron hinge that it may have come from this object or from that, and that it may be of mediaeval date. Yet we can take a tiny fragment of pottery and tell the finder that it was in all probability made at Cheam in Surrey in the last quarter of the fifteenth century and that it had formed part of a jug of a certain shape. It does not follow that "small finds" are of no interest simply because one cannot discover everything there is to know about them. On the contrary, such things are enormously stimulating, for they provoke endless arguments—and arguments and conjectures are the red and white corpuscles of an antiquary's blood.

As is invariably the case, the most important discoveries are not made in the present river-bed, but in the silt that lies beneath the flanking modern buildings. It does not mean that these relics are any better preserved than those from the

main channel, merely that they can be more readily examined. A classic example was provided by the discovery of a sunken barge lying alongside a forgotten quay, both of which came to light in 1949 during the building of the new Bankside power station. Had these finds been hauled from beneath the water in the teeth of a dredger's grab, all that we should have seen would have been a heap of splintered and meaningless timbers. But under the existing conditions it was possible to examine both the barge and the quay before they were



24. Iron guisarme found in a fifteenth-century barge during excavations on the Bankside. *Guildhall Mus.* (13)

disturbed. The workmen who uncovered the barge recovered from within it a fine, decorated, metal buckle and a vicious, double-pronged weapon of the pike family known as a guisarme (Fig. 24). Although these were found by unskilled hands, archaeologists were soon on the site and were able to date the boat to the latter years of the fifteenth century.

To salvage all the possible information from a discovery of that kind, one needs a combination of circumstances that is not always forthcoming. First and foremost, the need is for contractors, architects and site-owners who are interested in the history and antiquities of their site; and secondly, for skilled archaeologists who can be on the spot the moment a find is made. Thirdly, it is necessary for the builders to be using a method of excavation that enables the relics to be noticed before they are disturbed. This is asking a great deal, but occasionally the three requirements come together on one site, with results that can be valuable and exciting. As always, there are two sides to every question. The archae-

ologist is concerned with yesterday while the builder thinks only of today and tomorrow. At best the archaeologist is an inconvenience and at worst he is described in words that are quite unprintable!

It often happens that even when all circumstances are favourable, the results remain steadfastly negative. Early in 1954 excavations began at Kingston to widen the mouth of the Hogsmill tributary. It was hoped that this historic site might yield traces of mediaeval and even Saxon occupation on the banks. The contractors took every possible care to see that any antiquities were recovered, while the officers of the Surrey Archaeological Society kept a constant watch on every stage of the work. But the total result at the finish was practically nil. Rows of oak piles which were at first thought to be part of a mediaeval revetment turned out to have been driven in the eighteenth century, and the only worthwhile find from the whole excavation was a small bronze spout of the fourteenth or fifteenth century. But if nothing else was gained, the Hogsmill excavation served to illustrate the fact that more archaeological finds are made by chance than by design.

Queens, Filth and Pageantry

THE opening of the sixteenth century heralded an age of change, an era in which a new class was to grow up and in which England began its transformation into a nation of shopkeepers. The Renaissance caused an artistic awakening not only in the houses of the nobility but also in the homes of lesser folk. We learned to appreciate fine Venetian glass, the work of Italian goldsmiths, and the decorated pottery of the Netherlands and the Rhineland. Dress became more fanciful among the poorer classes, and we delighted to adorn ourselves with locketts, rings, ornamental buckles and fancy buttons. It was an age of pretty things, and the river was not slow to seize its share. Whereas in the Middle Ages it was content to take its toll of broken pottery, rusty horseshoes and a few decorative box fittings, now there were sufficient baubles for them to be scattered fairly liberally on the river-bed.

Along most stretches of the City's water-front, the river wall was pushed forward to its farthest extent by the end of the sixteenth century. Thus the foreshore that is exposed at low tide today is roughly the same as that which was uncovered three hundred and fifty years ago. It is for this reason that the mudlark finds more relics of the sixteenth and later centuries than he does of earlier periods.

But the story of the Thames in the sixteenth century is not confined to a list of the household refuse that may be picked up on its shore. The Tudors provided some of the river's most colourful events, and Londoners were not slow

to voice their appreciation. Those of us who enjoy waving flags and cheering processions need not feel sheepish or ashamed, for we have a long history of such occupations behind us. The sixteenth century provided ample opportunity for our ancestors to keep in practice. In step with the new policy of using the river as London's main thoroughfare many of the most vivid and exciting events took place on the water. Here the procession organizers could elaborate as never before. Banners and streamers could reach fantastic lengths without fear of becoming entangled in the windows of houses, while the Lord Mayor could travel in a suitably dignified manner without fear of being tipped from his horse by over-enthusiastic spectators. The latter aspect may not have been appreciated so well by the crowds, who loved nothing better than to disrupt the proceedings in one way or another. But there were definite compensations. More people could watch with less congestion, and the inhabitants of river-side hamlets were able to enjoy spectacles that had hitherto been denied them. At first the routes were confined to stretches from Greenwich to the Tower and from the City to Westminster, but later the acquisition of Hampton Court as a royal residence encouraged traffic between the palace and Westminster. The Lord Mayor's procession frequently took to the water at Blackfriars' and landed there on the return journey, making its way through the City streets to Guildhall. Londoners were therefore not entirely robbed of their chance to throw fireworks beneath the horses' hooves or to tip chamber-pots out of upper casement windows.

The first of the great Tudor river processions occurred on the occasion of the coronation of Elizabeth of York, queen of Henry VII, an event which at last placed the red and white roses in the same vase. The wars had been over for two years, but this was the final seal, and Londoners were not slow to rise to bestow their favours. The streets were hung with tapestry and arras, with velvet, silk and cloth of gold. As if

this were not enough, a contemporary chronicler takes care to point out that those streets through which the queen would pass were all thoroughly cleansed.

Elizabeth sailed up-stream from Greenwich and was met on the water by the Lord Mayor, the sheriffs and the aldermen, along with certain commoners from each of the City Companies. While these dignitaries rode in barges with their Company arms and banners, other craft were embellished with set-pieces not unlike those that one sees in carnivals today. The most impressive of these was the Batchelor's Barge, from which a dragon spouted flames on to the water. Having received the City's greeting, the whole procession moved majestically up-river to the Tower, where the queen was welcomed by Henry.

Forty-six years later a similar scene was to be enacted, but this time the settings were more sumptuous, and the central players more vividly remembered by us today. The part of the waiting king was taken by Henry VIII and that of his queen by the tragic Anne Boleyn. Water pageants have, of necessity, a certain similarity one with another, and so it is not surprising that those of Elizabeth of York and Anne Boleyn should follow much the same pattern. There was, however, one important difference. In this instance the Lord Mayor, sheriffs, aldermen and Company members accompanied the young queen over the entire distance from Greenwich to the City. At one p.m. on 29th May, 1533, these dignitaries boarded their fifty waiting barges near Billingsgate and set out for Greenwich. The procession was led by a small vessel carrying cannon that fired salutes at frequent intervals and which was decorated with a dragon that could move and disgorge fire from its mouth. This appears to have been a stock piece of Tudor pageant equipment. Lest the dragon were not sufficiently exciting, the ship also carried a miscellany of "terrible monsters and wild men casting fire, and making hideous noises".

Once again the Batchelor's Barge was the centre of attraction, for it carried a troop of musicians who played stirring tunes on trumpets, shalms and sackbuts. These romantically named instruments were wind-blown, the sackbut deriving its name, so an early dictionary states, from the Spanish *sacar del buche*, "to fetch the breath from the bottom of the belly"—from which we may gather that playing a sackbut was inordinately hard work.

The decks, sailyards and topcastles of the Batchelor's Barge was hung with silk and cloth of gold, while at bows and stern were hung magnificent streaming banners emblazoned with the arms of the king and queen. The sides were adorned with flags and banners of the Haberdashers' Company (the Lord Mayor for the year being a member of that Company), which bore the cost of embellishing the Batchelor's Barge. On the hull were affixed three dozen metal scutcheons bearing the arms of Henry and of Anne, and from the yards hung small bells that sparkled in the sunlight and jangled gaily in the wind.

On arrival at Greenwich the procession reformed and stood off-shore to await the appearance of the new queen. At three o'clock Anne came out on to the steps dressed in a breathtakingly beautiful gown of cloth of gold, and slowly made her way to the waiting barge. This was her hour, a moment to be savoured to the full. Waiting for her in their own barges were the highest nobles in the land, and one wonders what thoughts passed through their minds as they greeted the woman for whom the king had divorced his queen and had abandoned the Church of Rome. One wonders, too, what Anne's feelings must have been. She could hardly have guessed that she was fated to be queen for only three short years, or that the Tower where her husband was waiting housed also the block on which she was to lose her head. On that glorious spring day in 1533 there were no clouds in the sky. Choirs sang, music played and all was right with the

world of Anne Boleyn. Along the river banks villagers and Londoners were dutifully cheering while the air was rent by the roar of the guns as moored shipping fired its salutations.

Looking back over the accounts of this and many other river pageants of the sixteenth century, one cannot help feeling that repetition must have become a little tedious. To describe each here would undoubtedly make very dull reading, for although they were sponsored by differing City Companies the overall effect was generally much the same. But even if some Londoners were not enthralled by each display, they all welcomed the chance to take a holiday. Housewives forgot their chores, apprentices escaped from their trades and London's light-fingered gentry were able to put in a busy and lucrative day among the light-hearted crowds.

But not every day was one of holiday and pageantry. History, as we are so often told, has an unfortunate habit of repeating itself, particularly when much of it concerns the ordinary happenings of daily life. The citizens of London lived the same repetitive lives that we do. They did the same things day after day, year after year; and what is more important, they threw the same kind of things into the river. They broke their pottery, lost their hats, purses, toys and threw away anything for which they had no further use. But it does not follow that the mundane relics are of no interest. Nothing could be further from the truth. Each one is a spark to ignite the tinder of our imagination.

Pottery is liberally scattered on the foreshore, but coins are still infrequent. One finds the occasional silver penny of Henry VIII, but it is not until the latter years of Elizabeth I that there seems to have been any marked increase in the losing of coins into the river. In most cases finds of coins are isolated and in no way connected with each other. But there was one dramatic exception—a day in which the river yielded up treasure in its most exciting form.

As we approach London Bridge from the north we find

the hall of the Fishmongers' Company on the right and see beside it a flight of stone steps leading down to the river's edge. It was in 1832, when these steps were being built, that workmen uncovered a small number of coins that gleamed yellow against the black of the river silt. Every workman who has ever dug the smallest hole must dream of the day when he uncovers a lost treasure. These men were not disappointed, for the coins shone not with the yellow of brass or bronze but of gold. No one knows exactly how many were found, but a contemporary report refers to there having been at least thirty or forty gold half-sovereigns and angels of Henry VII and Henry VIII. They are said to have been lying on the surface of the river-bed, "which consisted apparently of burnt ruins". Like so many of the treasure stories of a century or more ago, no careful records were kept concerning the circumstances of such finds. The objects themselves were generally all that mattered, and in this case it seems likely that the money was soon spent to make a Cockney's holiday.

The London Bridge find represented the largest and most valuable group of gold or silver coins yet to have been recovered from the Thames, and it is frustrating beyond words to know so little of it. However, the short account of the find has rather more to say concerning other discoveries made during excavations in the same area. The building of the steps had been but one feature of the extensive operations relating to the construction of the new London Bridge. Other work included the rebuilding of the adjacent waterfront, and a continuation of the bridge foundations to Thames Street and beyond. It was while the latter work was in progress that an earlier river wall came to light. Its exterior was solidly built from faced blocks of Purbeck and Kentish ragstone which were laid, so we are told, in a similar manner "to the piers of the late ancient original bridge". Behind the even face was packed a filling of hardcore consisting largely of chalk. The wall was apparently breached

here and there by "... small jetties forming docks and quays which were doubtless, at some time, landing and discharging places". This description is none too clear, for there is no indication of whether the "jetties" had been part of the main structure or, indeed, whether they belonged to it at all. More recent excavations have shown that this particular stretch of lost river-bed between Thames Street and the existing frontage is riddled with timber foundations that can have been constructed at varying dates from the first century to the sixteenth.

The same report mentions also the discovery of a timber embankment that came to light at a point where the new London Bridge crosses Thames Street. It was found at approximately ten feet below street level and consisted entirely of massive piles, each of which was stated to have been fashioned either from oak or chestnut. The timbers were adzed, two feet square in section and at least ten feet in length. There is, unfortunately, no way of knowing how old the piles may have been, for in 1832 no one had ever heard of dendrochronology. From their inferred position, it seems possible that they formed a basis for the Roman riverside wall. But this is pure guesswork, for it is equally possible that they were driven into the river silt centuries later. We can but draw our own conclusions, and hope that in years to come further excavations will uncover more traces of these early structures.

Many laymen find it hard to believe that archaeologists of today are able to dig up a fragment of apparently featureless pottery and announce categorically that it was made, say, at some time between fifty and eighty A.D. But this seemingly impossible feat can be accomplished with fair accuracy, and every year new research adds further pages to the histories of common objects. Advances in the study of annular tree growth have made it possible, on occasions, to discover the exact year in which a pile or plank ceased to

form part of a living tree. Fluorine and carbon tests on ancient bones can enable experts to date their finds more closely than ever before. These and many other developments are serving to make archaeology an exact science. To the man in the street much of it must sound like science fiction or pure wishful thinking on the part of the experts. I can recall working on a site with a well-known archaeologist who was heard explaining to a workman how a clay tobacco-pipe could be dated to within a few years. He went on to announce that the pipe he had just found had been made in about 1630. A listening labourer turned to his mate and muttered scornfully, "Yus, on a Friday!"

A river is nothing without ships, nor is it sufficient for it to be a mere anchorage for vessels of other nations. It fell to the Tudors to ensure that we had ships of our own to sail forth from London's river. Henry VII was eager that England should possess a navy that could hold its own against all comers. The work that he began was continued by his son, and between them they laid the keel for the immortal navy of Elizabeth. The Thames has no longer to rely on historians to keep alive the story of Henry VIII and the navy, for during demolition work at Deptford, in 1952, part of one of his original storehouses was discovered to have been incorporated into a more recent building. As workmen's picks bit into blitzed walls, later brickwork fell away to expose long-forgotten mullioned windows that still retained their original ironwork, a Tudor fireplace and a large, decorative, brick niche bearing the inscription "A.X.H.R." (Anno Christi Henricus Rex) "1513". It had been hoped that the L.C.C. would have been able to ensure the preservation of this historic discovery *in situ*, but unfortunately this was not to be. Only the mullion window and the niche were retained, and these were removed for eventual display elsewhere.

At the time of his death Henry's navy possessed fifty-three ships, most of which were armed with the new, heavy cannon

that had revolutionized fighting ships of that time. With his finances greatly bolstered by loot from the monasteries, he had been able to lay down, though not complete, no less than eighty-five "King's Ships", the greatest of which was undoubtedly the famous *Henri Grâce à Dieu*, the ship that is remembered by every lover of the sea as the *Great Harry*. She was the pride of Henry's navy, and when she came to her ignominious end the dead King must have wept in his grave. On 25th August, 1553, the great ship lay at anchor in the Thames off Woolwich, a sight to gladden the hearts of Englishmen. She was then registered as being of one thousand tons, having nineteen brass and a hundred and two iron guns and having a complement of fifty gunners, three hundred and one sailors and three hundred and forty-nine soldiers. On that day she caught fire and was soon ablaze from stem to stern, eventually settling beneath the water in a white shroud of steam. The diary of Henry Machin, a London citizen, records that on that day "... was burned the Great Harry, the greatest ship in the world ... at Woolwich, by negligence and for lack of oversight; the first year of Queen Mary."

Machin's diary for the previous year recalls that on 10th September a heavy thunderstorm broke over the south-eastern counties and drove three giant but unspecified fish into the estuary. When the storm had abated the fish were still heading up-river and were spotted by villagers along the shores. Scores of people leapt into any available boats and set out in pursuit. Armed with nets and bill-hooks they drove the unfortunate creatures up to London Bridge, but there the fish doubled back on their tracks, momentarily eluding their attackers. By this time the "fishermen" had been joined by numerous London craft. No sooner were the escaping fish sighted in the distance than the entire fleet turned round and bore after them. Londoners who were watching from the wharves waited until the last boat had disappeared round the



XXII. Roman memorial set up by Heraclia to her husband. From the foreshore at Tilbury. *Courtesy P.L.A.*



XXIII. Marble fragment of a river-god. From the Walbrook, possibly from Temple of Mithras. *London Mus.*

XXIV. Gold medallion found at Arras, reverse showing Constantius Chlorus being greeted at the gates of London, while below a galley rides on the Thames. Late third century.





XXVa. Pewter pilgrim badges. St. Thomas of Canterbury, 15th century.



St. Leonard



Master John Schorn



St. John the Baptist



St. Joseph



Master John Schorn



St. Richard of Chichester



St. Catherine



St. Victor of Marseilles



St. Hubert



St. Paul

XXVb. Pewter pilgrim badges. Various shrines. Fourteenth and fifteenth century. *Guildhall Mus.*

bend in the river, and then returned to their work. It would seem that Henry Machin was among the spectators, for he records the details of the pursuit up to that point yet fails to tell us what happened in the end. We can only hope that the unfortunate fish made good their escape and lived to tell their children how they came to be numbered among the legendary "whoppers that got away". We have no record even of their species. But it seems almost certain that they were large porpoises.

The strange fish-hunt occurred during the short reign of Edward VI, and he himself travelled more than once on the route from Westminster to Greenwich. On 3rd April, 1553, as he passed down-river he was greeted by the customary royal salute from guns at the Tower, and then by salvos from every ship along the wharves. At the village of Ratcliffe the salute was fired from three ships that were being rigged for a voyage to Newfoundland. Ratcliffe was as yet an isolated village close to Wapping, but like all the Thames-side villages between London and Greenwich it was rapidly growing in importance. Every page in England's maritime history owes something to the hamlets of Wapping, Rotherhithe, Ratcliffe, Limehouse and the rest. One might expect that these stretches of the river-bed would contain a veritable treasure chest of historic refuse. But strange as it may seem, very little has been found on the foreshores. However, we have only to remember the Wapping reliquary to know that the river does hold its secrets here—even if it is not ready to divulge them.

Wapping was well known in the sixteenth century as the home of sailors, and so it is not surprising that their wayward brethren should be brought there to die. As early as the fifteenth century, pirates had been hanged at Wapping; and, as the years went by, Execution Dock became known to sailors the world over. Scores of miscreants were brought to London, tried at Guildhall and taken straight to Wapping to

hang on gibbets that sprouted like trees from the foreshore. To die thus was known as receiving "The Grace of Wapping". There the malefactor hung in chains until three tides had engulfed his body.

John Stow, the famous topographer of Elizabethan London, stated that in his time the gallows had been moved down-stream almost to Ratcliffe so as to keep the execution site at some little distance from the houses that were spreading ever eastward. In the mid-sixteenth century there was still open ground between St. Katherine's Dock and Wapping, and it was there that the gallows were set up. Antony van den Wyngaerde's view of London (c. 1550) does not show a series of single gibbets, but one common structure on which a number of candidates could hang together. It was not of the three-legged type that later became so useful at Tyburn, but a simple structure of two uprights supporting a horizontal beam. The exact site of the later Wapping gallows has been a subject of some speculation, and there has also been a divergence of opinion regarding the method of execution. But it is now generally agreed that in later years the gallows stood on a site near Tunnel Pier. It was here that one of the chain harnesses that bound the condemned men is said to have been discovered in the river mud.

One of the stock situations of popular fiction requires that the hero should be pardoned or found innocent of his supposed crimes just as the hangman is about to hoist him on high. One rarely believes that such things happen in real life. But apparently they do, for in Machin's diary for 25th April, 1562, we read that five robbers of the sea were hanged at low-water mark and that a sixth had "... his halter about his neck and yet a pardon came in time".

The sadistic pleasures of seeing someone die were available to all Londoners, and large numbers made full use of every possible opportunity. The crowds that gathered at Smithfield or Tyburn were bloodthirsty enough, but those who

sought their entertainment at Wapping were far worse. They were strange people, these Londoners who were basically honest, hard-working and God-fearing souls, yet would scream for blood just as loudly as any Roman at the Colosseum. A psychiatrist would probably explain it as a primitive instinct that has become erased to a great or lesser extent by education, an instinct that is not yet dead in those who visit the site of a recent murder or congregate round a street accident. Londoners who found pleasure in such things were to be vastly entertained during the reign of Mary, for it is she who takes the central rôle in the next few years of the river's story.

Mary I, as everyone knows, brought about a return to Catholicism and a wedding with Spain, neither of which endeared her to her subjects. In London it became a common sight to see one's neighbour nailed by his ears to a pillory for uttering an indiscreet jest about Rome or the Queen. Both men and women were daily beaten through the City streets while tied to the tail of a cart, and scores met their death beneath the axe, at the stake or by being boiled alive. Dark days had returned again. The glitter had left the river. It is true that the Queen travelled by water from time to time, but there was rarely much spectacle to accompany her. The Lord Mayor still made his way by water to Westminster, but the trumpets were muted and many of his attendant dignitaries must have feared that their next river trip would take them to the Tower through Traitor's Gate.

The Bridge, as always, continued to play its lively rôle in the events of the day. The southern gate was regularly adorned with the heads of malefactors who had died on the gallows at Tyburn and elsewhere. While this was certainly a barbarous practice, it was less unpleasant than the habit of quartering the bodies and hanging them at conspicuous points round the City. Sir Thomas Wyatt was one of those who came to this unhappy end during Mary's reign, but not

before he had added his page to the story of the Bridge and of the river.

Sir Thomas was among those who resented Mary's intended marriage with Philip of Spain. On 26th January, 1554, he hoisted the flag of rebellion, seized Rochester and gathered the men of Kent to his cause. A detachment of the London train-bands, sent out under the Duke of Norfolk to check Wyatt's advance, turned their coats and joined the insurgents. At first the rising seemed so successful that Mary thought it wiser to try to come to terms with Wyatt, but his demands were so excessive that there was no room for bargaining. He marched on London and the City prepared itself for battle. A section of London Bridge was pulled down, guns mounted, and special guards were placed aboard all boats on the river. On 1st February Mary rode to Guildhall and rallied her doubting subjects with the promise that she would never marry outside the realm without the consent of the Council and the approval of the citizens. Having pledged herself in this way to ensure London's support, she rode down to Three Cranes Wharf and there boarded her barge for the journey to Westminster.

Two days later Wyatt and his army arrived in Southwark, where they started to dig themselves in and to set up their guns. But the threat that the Tower artillery would open fire on the suburb, thus killing scores of innocent people, made Wyatt change his plans. He marched away westwards to Kingston, where he crossed the river and again advanced on London. But he found that he had miscalculated the number of supporters he hoped to gather *en route*, for while most Londoners hated the idea of a Spanish marriage, they could not condone the sin of rebellion against the Crown. Not only did Wyatt fail to gain recruits, he also found that his original supporters were losing heart. After fighting his way down Fleet Street he found himself unable to penetrate the City at Ludgate, and so surrendered himself to the Queen's mercy.

Mary is not remembered for her gentle, tolerant or forgiving nature, and Wyatt paid the normal price of high treason. He was executed on Tower Hill on 12th April, his body quartered, parboiled, and displayed in the customary manner. The fate of his head is not recorded, but there is little doubt that it returned to the Bridge to look down on Southwark and the people whom he saved from Mary's guns.

Mention has already been made of the hazards of shooting the bridge, and of the craft that were smashed to pieces as the water boiled and roared on its way between the starlings. On occasions it was thought wiser for the nobility to land before reaching the Bridge and to re-embark when their boatmen had manœuvred the craft into calm waters. They may well have learnt their lesson in the preceding century when the barge of the Duke of Norfolk had been wrecked against the Bridge with the loss of thirty lives. But whether they remembered this or not, those who hurried the young Princess Elizabeth to the Tower after the Wyatt Rebellion were prepared to take chances.

On the morning of Palm Sunday, 18th March, 1554, it was made known that all citizens of London should carry their palms to the churches, thus ensuring that no one should see the barge with its royal passenger and grim-faced guards. In their haste her warders refused to listen to the bargemen who claimed it would be madness to shoot the bridge when the tide was so low. But the guards would brook no delay, with the inevitable result that the barge was hurled hither and thither in the maelstrom to ground stern first on a mud bank. No damage was incurred and the barge continued downstream to the Tower, but on arrival the tide was too low for the vessel to reach the stairs. Still sick from a fever, the wretched Princess was forced to wade ashore in pouring rain to begin her sojourn in the Tower. It is said that she had refused to pass through Traitor's Gate and so landed at the

stairs. These are the steps now known as the Queen's Stairs, and were last used by a reigning queen in 1938 when Queen Mary arrived by water.

The worthy citizens of London who were not eager to endure a return to the yoke of Rome took comfort from the thought that their Catholic Queen could not reign for ever. As it turned out she was to rule for only five years, and at her death they were able to embark on a more rosy future at the hands of Elizabeth. We need no reminding that in the late sixteenth century England rose to her greatest heights, and it is not surprising that London was visibly swelling with civic pride and commercial prosperity. The Thames shipyards were producing the finest vessels afloat, and the quays, ale-houses, taverns and brothels were teeming with mariners ready to sail in them.

The river was lined along its north bank from Blackfriars' to Westminster with magnificent houses that were in reality small palaces, and from them their noble owners were rowed in almost regal splendour from place to place. The Thames may have been dirty—and no one can deny that it was—but the Elizabethans did their best to ensure that they gilded their evil-smelling lily. Nevertheless foreign visitors could not resist the temptation to remark on the effluvia. To recall but a single example, I quote a certain Orazio Busino, who described the waters as: "... so hard, turbid, and foul, that its smell may be perceived in the linen which is washed with it". So unpleasant an observation says little for the Londoners who wore the river-washed linen. But we must confess that cleanliness has only recently become a virtue.

In 1854 a letter in *The Times* read as follows:

"I am one of those unfortunate lawyers who 'hug the festering shore', and festering it is indeed, with a vengeance. The stench in the Temple today is sickening and nauseous in the extreme; we are enveloped in the foul

miasma, which spreads on either side of this repository of the filth of nigh three millions of human beings."

In the same year a speaker in the House of Commons admired the fact that: "they had built on the banks of the Thames a magnificent palace for the legislature", but deplored a state of affairs in which no foreign visitors could be brought there without being "... welcomed by a stench which was overpowering". He went on to recall that in his youth Thames salmon had been much prized, but that now the salmon, "... wiser than members of Parliament, had avoided the pollution", leaving cartloads of dead and dying fish to be hauled from the river. These complaints were voiced a little over a century ago, and, as we all know, great improvements have taken place since then. It therefore comes as something of a shock to read in a newspaper of 1954, exactly a hundred years later, that the residents of Erith, Bexley, East Ham, West Ham, Hornchurch and Barking were planning to send a deputation to the London County Council complaining about the smell from the river!

In view of the fact that so many of the river finds of the Tudor and Stuart eras are associated with clothes in one form or another, it seems admissible to consider the dress of Londoners of three and a half centuries ago. Then, as now, we did the best we could to "keep up with the Joneses", and in 1592 the Duke of Württemberg described our women thus:

"... they go dressed out in exceedingly fine clothes and give all their attention to their ruffs and stuffs, to such a degree, indeed, that, as I am informed, many a one does not hesitate to wear velvet in the streets, which is common with them, whilst at home perhaps they have not a piece of dry bread."

It was an age of buttons and bows, with the accent firmly

on the buttons. They were worn round hats, on doublets, coats and jerkins, and it is not surprising that many have found their way into the river. Buckles were worn on the shoes, and, as Stow is pleased to inform us, "... the common sort wore copper buckles, and the best sort wore buckles of silver, of copper gilded". These were the lasting fittings and embellishments of clothes of the greatest richness, decorated with slashing backed by coloured velvets and silks, or adorned with gold and coloured thread worked into every design that artistry could devise. But it is the buckles, buttons and clasps that survive in the river, not the clothes from which they come. Long after a coat has become no more than a dirty mark in the mud, the buttons still lie in position, grouped just as the tailor had arranged them. Such finds are among the most personal and pathetic that the river can yield to us. They are the last relics of people who lived through the City's finest years, and for that reason—if for no other—a button or a buckle deserves an honoured place among the river's larger and more impressive antiquities.

Most touching of all Elizabethan relics from the Thames are the battered children's toys. Some are broken and thrown away for that reason, while others are complete save for wear occasioned by their long sojourn in the river. Their discovery today evokes the echo of childish tears shed more than three centuries ago. Toys were neither so varied nor so plentiful as they are in this modern age, but, strange as it may seem, their basic forms have changed little. Children played ball games, rode hobby-horses, owned dolls and toy animals. Two such animals are illustrated here (Pls. XXXIII and XXXIV), and both were found on the north foreshore near Southwark Bridge. The difficulties of dating such simple things are often insuperable. But sometimes parallels can be found in paintings and contemporary drawings or clues obtained from some small identifiable feature.

The small red, pottery dog is a pathetic shadow of its

former self, its floppy ears framing a single, expressive eye—all that remains of a once handsome canine countenance. The datable clue is provided by the heavy, linked collar, for these appear in drawings and on sculptured dogs of the late sixteenth century. The legs of the little model have suffered, but sufficient remains to show us that model-making in those days was not without its artistic standards. The other illustrated animal model, a white pipe-clay lion, is more difficult to date, for it is a deal more crude in conception and certainly less skilfully made. The creature was manufactured in a two-piece mould that has overlapped with disastrous results, for the two halves of the head fail to coincide. The back and legs have been roughly smoothed before firing to remove the numerous bumps and blemishes left by the uneven moulds. All in all, it is not a very successful effort. But although the head is primitive by comparison with that of the dog, the treatment of the mane and the suggestion of ribs are surprisingly lifelike. Both on the mane and on the mouth are traces of pink colouring which suggests that the whole lion was originally painted—although pink would seem to be a rather improbable colour for such an animal. The dating of the model is uncertain. But the most valuable piece of evidence came to light in Cheapside in 1955 when a builder's labourer dug up a pipeclay model of a lamb, and beside it found a clay tobacco pipe of the mid-seventeenth century. The lamb was of the same size, clay and colouring as the lion and was undoubtedly its contemporary. It therefore seems fair to suggest that both were made in the late sixteenth or early seventeenth century.

A rather more attractive find from the Southwark Bridge foreshore is illustrated in Pl. XXXII. Today the schoolboy's mind is centred on ray-guns or weapons that fire atomic projectiles, but the boys of Elizabethan London were equally progressive, for their guns copied the very latest developments. At that time a weapon known as a *petronel* was among

the latest developments in fire-arms. This made use of the new wheel-lock firing system which was proving to be safer and more effective than the old match-lock. The new short carbines and pistols were complicated and expensive to make, and so in their way were comparable with the latest developments of today. Models of the *petronel* were extremely popular among Elizabethan boys and were produced to suit every purse. The cheapest were made of lead or pewter, had solid barrels and no moving parts. Two or three of these have been found on the foreshore. But the more expensive models were of brass, had hollow barrels and possessed various movable attachments. Some went so far as to copy the engraved decoration that ornamented the barrels of real weapons. The example that I recovered from the mud at Queenhithe is one of these. The barrel is chased and the stock terminates in a pomegranate knob—a typical feature of the *petronel*. Unfortunately the ram-rod has gone, and so too has the mechanism, but it is still a fascinating and remarkable toy. It is not only attractive but also a model with a sting. While it is doubtful whether the moving parts were ever intended to do anything other than look realistic, the barrel was drilled along its entire length and the touch-hole from the firing-pan is drilled to meet it. It is obvious, therefore, that this toy was made so that it could really fire its small quota of powder and shot. We have only to imagine family reaction if a modern boy were given a priming of uranium for his atomic pistol to realize that Elizabethan toys were, by comparison, even more progressive than our own.

Regardless of its dangerous qualities, the toy *petronel* can be numbered among the most delightful Elizabethan finds to have been made in the river. It is not as complete as some that have been found in years gone by, but its quality can be classed among the best and its state of preservation is far superior to most. Very rarely have I visited the same stretch

of shore on two consecutive occasions. But on a particularly sunny day in 1951 I found myself wandering along a stretch of foreshore that I had covered on the previous evening. The two tides that had flooded over it in the interim had made little difference to the distribution of the pebbles and mud, and no treasures had been forthcoming. But just as I was leaving I stopped beside a patch of silt that had been thoroughly examined on the preceding day, yet there, shining on the surface, lay the precious *petronel*. The ebb and flow of the tides had revealed it, perhaps for the first time in three hundred years, and it was quite probable that within a few hours they would cover it again, hiding it for months, years, even centuries. Time and again one finds that the river plays the strangest tricks. Half a nineteenth-century knuckle-duster turned up on the Southwark shore in 1949, the other half appearing in 1953 at exactly the same spot. Part of a Tudor pottery money-box was found at Queenhithe in 1948, and two more fragments were reunited with it in 1955. So fantastic are these coincidences that only mudlarks who know the river can be expected to believe them.

Ever since gunpowder was invented, boys of all ages have loved fireworks. They are certainly no more popular today than they were among the Elizabethans. Then, no entertainment could hope for success without a display of pyrotechnics, and the Queen herself was an enthusiastic spectator. It was not until the late eighteenth century when potassium chlorate was introduced that it became possible to burn metallic salts and so make coloured fireworks. But the Elizabethan squibs, rockets and set-pieces were none the less dramatic for all that.

On May Day, 1559, two pinnaces decked with banners and streamers and carrying musicians were "going a Maying" up the Thames. When they reached Westminster they began a friendly battle by throwing eggs and oranges from boat to boat. Soon the crews were tossing squibs at each other, much to the enjoyment of the Queen and her courtiers, who were

watching from a palace window. Suddenly laughter turned to tragedy when a burning squib landed in a bag of gunpowder. A blinding glare lit up the evening sky and at once the pinnacle was enveloped in a pall of grey smoke. Musicians, passengers and crew leapt, with their clothes burning, into the welcoming river. In a few minutes all that remained of the gaily decked pinnacle was a cloud of smoke that quickly rolled away across the water and was dispersed by the evening breeze. Gunpowder accidents generally resulted in heavy casualties, but on this occasion, the powder not having been compressed, there was no explosion and no one was fatally injured.

Tudor weapons are not common in the river, although a few are represented among the many of various periods that have turned up during excavations along Thames Street. But there is one example that stands out beyond all others. A heavy dagger with a sword-like hilt was found many years ago in the river at Wandsworth (Pl. XXVIII). It is known as a *main-gauche* and was used as a parrying weapon in duelling—an art that was rapidly gaining popularity in Europe. The weapon, which is now in the Guildhall Museum, is not basically a thing of beauty, for its shape is clumsy and seemingly ill-balanced. The hilt, however, is beautifully inlaid with silver and gold in the form of male and female figures, separated by complex scroll designs. The figures are dressed in Teutonic attire, thus proclaiming the weapon's place of origin. The most curious feature of the weapon is the fact that it should be in the Thames at all. Its very specialized purpose made it an unlikely and unwieldy weapon to wear like a normal dagger or rapier, and even if one did choose to carry it about, the Wandsworth shore would be an extraordinary place on which to lose it. It was a weapon that would not have been owned by any but a man of wealth, nor is it sufficiently damaged to warrant its being thrown away. How, then, did it find its way into the river?

Duelling was frowned upon in England at this time, although youths were not thought to have reached manhood until they had at least once indulged in some form of single combat. It is possible that two noblemen retired to a quiet field at Wandsworth to settle their differences and one, having killed the other, threw the body into the Thames and the weapons after it. Or it is equally possible that the *main-gauche* was stolen, and that the thief later decided that it was too conspicuous and so dropped it in the river.

The south bank of the Thames gained rapidly in popularity during the sixteenth century, the houses spreading out from Southwark along the river bank to east and west. All through the Middle Ages the Bank side had been a resort of the less desirable elements, for although it could boast the presence of the Bishop of Winchester's palace, it also housed the bishop's brothels, or *stews* as they were called. The prostitutes were forbidden to reside in the City, although they were allowed to ply their trade in Southwark providing they complied with certain regulations. Prostitution was thus legalized. Their presence in the borough provided an admirable source of business for the Thames watermen, who ferried their clients backwards and forwards across the river. The Southwark stews had been granted a royal warrant as long ago as the late twelfth century. But this was later withdrawn by Henry VIII—surely one of the most curious anomalies of London history. However, the withdrawal of royal licence made little difference to the inhabitants of Southwark, save that nobles, Lord Mayors or aldermen would no longer admit to owning the stew-houses.

Southwark's most famous Tudor association is, of course, with the theatres—the Rose, the Hope and the Globe. A flight of stone steps leading down to the river beside Southwark Bridge is still claimed by some guides to be the original flight used by Shakespeare and the City's Elizabethan and Stuart playgoers. But, sad to relate, the steps are

comparatively modern. The presence of the theatres, along with the cockpit, the bear-baiting and bull-baiting rings made the borough into an entertainment centre comparable with our own "West End". While the reasonably respectable citizens crossed to the south bank during daylight hours, the compliment was returned under cover of darkness. Thieves and cut-throats slipped silently across the water from their homes around the Bankside to rob, brawl and murder in the streets of the City. Night after night waterside residents would hear the splash as the bodies of victims were tossed into the river. Rarely would honest citizens venture out after dark, for even after avoiding the daggers of Bankside thugs, they could as easily earn a cracked pate through walking the same street as a bunch of brawling apprentices.

One can only guess at the number of odds and ends that must have found their way into the river as a result of these nocturnal activities. Buttons from a coat, the metal frame of a purse, a leather shoe—they could all be relics of untimely death. One point at least is certain. There were too many human jackals about for many objects of intrinsic value to be left for us. Gold and silver buttons would have been ripped from garments as they lay on the filthy shore; so, too, would shoe buckles, rings and any other jewellery that may have escaped the nimble fingers of the original thieves or murderers. For the same reason, coins are few and far between. One must remember also that the shores have been searched for centuries by London's down-and-outs, and coins of any age spelt money to these unfortunates. Thus the modern mudlark knows all too well that the river will give back a hundred potsherds and pieces of old iron before it can afford to release a single, battered, silver coin.

Of Kings and Commonwealth

THE advent of the seventeenth century brought the Thames to the beginning of its most dramatic phase—dramatic insofar that events which took place on or beside the water are more fully documented than ever before. What, one might contend, could be more dramatically effective than Julius Caesar's crossing of the river, or the saving of London from the looting army of Allectus? It is true that both these events are documented, but the words are formal and lacking in what we describe today as "human interest". It is well known in journalism that news only becomes a "story" when it can be expressed in human terms. Events are nothing without the people who make them happen. The same is true of history, for the past can only live again when we are able to produce the personal link.

Every now and again archaeological finds are able to bridge the gap of time and so enable us to catch a glimpse of their long-dead owners. The fragmentary, inscribed Roman tablet from the Walbrook is perhaps one of the finest examples. Obviously one cannot produce eye-witnesses who saw or took part in the great news stories of the seventeenth century. But we can do the next best thing by eavesdropping on the lives of those people through their diaries. Luckily, two of the seventeenth century's premier diarists, Samuel Pepys and John Evelyn, both spent much of their lives in and around London. The diaries of these two, and of lesser men, have much to say of the Thames, and so in this way the

great river events of that era come to life by courtesy of the deceased eye-witnesses.

It is a happy coincidence that the increase in literary evidence is matched by a great increase in the number of river relics that stem from the seventeenth and eighteenth centuries. It is true that fewer large finds are recovered by dredgers, but the small personal possessions, the relics of industry and commerce, of life, love and death, all are there in profusion, ready and waiting to be found—providing we are able to recognize them.

London suffered three great disasters in the seventeenth century, and the river has yielded relics of two of them. The first was the Civil War, when Englishmen spilt the blood of Englishmen into the water at Brentford. In the City the subsequent era of the Commonwealth was either a catastrophe or a blessing, according to one's view. The second and third disasters followed hard upon each other: first the Great Plague of 1665, and then the Great Fire of the following year. Catastrophies, of course, always make the headlines while happier occurrences are relegated to the middle pages. This is as true of history as it is of contemporary events. But there was one lighter river story that reached the "front pages" of the time, for the simple reason that it was a curiosity that captured the public imagination. The great frost of 1683-84 froze the Thames to such a depth that a miniature town sprang up on the frozen water and horses were raced from Westminster to Blackfriars'. But between these unusual events life went on its normal way, with Londoners travelling on, living beside and throwing their refuse into the ever-flowing Thames.

Before the seventeenth century had scarcely begun, the great Elizabeth was dead and James of Scotland sat on the English throne. The men who had made England great were either dead or too old for further service. Drake, Grenville, Hawkins, Frobisher, all were gone. Raleigh was imprisoned

in the Tower with no future before him but a prematurely doomed voyage to the Orinoco, while Drake's fabulous *Golden Hind*, symbol of Elizabethan maritime prowess, lay rotting in a dock at Deptford. But although the glory of the sixteenth century had begun to tarnish, the business of living and making money was becoming more gruelling, and the river consequently grew busier than ever before. It has been said that in 1594 the river gave employment to no less than forty thousand people—no doubt an exaggeration, but even if halved the figure remains impressive. A passenger vessel was plying between London and Gravesend at the close of the sixteenth century, and at that time there were said to be no fewer than two thousand wherries or water taxis in constant service on the river. Some idea of the extent of the traffic is provided by John Taylor, the celebrated "Water Poet", when he wrote a complaint on behalf of his fellow-watermen decrying the loss of trade occasioned by the growing popularity of coach travel. He claimed that many watermen were ruined by the falling-off in their business, alleging that when the Court was ensconced at Whitehall they lost something in the neighbourhood of five hundred and sixty fares a day from courtiers, sycophants and sightseers.

While the watermen certainly had cause for complaint, they were far from being driven out of business, and, indeed, they and their successors continued to ply for hire for the most part of the next two centuries, until the building of new bridges slowly removed the need for their services. In the seventeenth century the watermen were frequently so busy that they could afford to refuse passengers who were not prepared to pay exorbitant fares. On August 23rd, 1662, when Charles II brought Catherine of Braganza to London by water, there was not a boat to be hired anywhere along the river-front. The worthy Samuel Pepys was among the many who sought in vain for watermen to carry them to Whitehall. That evening he wrote in his diary:

"Mr. Creed and I walked down to the Tylt Yard, and so all along Thames-street, but could not get a boat: I offered eight shillings for a boat to attend me this afternoon, and they would not, it being the day of the Queene's coming to town from Hampton Court."

Although the passengers must frequently have found the watermen surly, uncouth and dishonest, the boatmen in their turn must often have had cause to complain of their treatment by the passengers. Roisterers seeking pleasure on the Bankside avoided payment by hiring the boat for the two-way journey, having no intention of returning by water, so leaving the unfortunate watermen to wait for passengers who never returned. This was but one of many ruses employed to cheat the boatmen of their fares. It is hardly surprising that the watermen were always eager to make good their losses by scoring off their more gullible passengers. What could be better game than a well-dressed drunk who could be robbed and pitched into the river without any questions being asked? This brand of sport was not confined to watermen, for there was many an alehouse along Thames Street or on the Wapping-Ratcliffe waterfront where drunken sailors learnt too late that their lives were worth no more than the contents of their purses. It is tempting to wonder how many of the pewter and brass buttons that turn up on the foreshore were once attached to coats worn by men who fell to their deaths in this way.

Today, the fact of such lawlessness existing in modern London would cause honest citizens to ask questions in the House, to call for public enquiries and certainly to write letters to *The Times*. But three centuries ago life was cheap; Londoners were too busy looking after their own affairs to worry over the fate of strangers. Besides, there was no police force to keep order, and the gentlemen of the watch appointed by the City Wards were generally more concerned

with keeping out of trouble than with sallying forth in search of it.

Once in the water the bodies were left to float beside the carcasses of dead dogs, cats and rats, and to lie on the stinking shore amid the City's refuse until the next tide carried them off again. No one wanted the responsibility of fishing the corpses out of the water, and no parish was eager to bear the cost of burial. On 4th April, 1663, Pepys wrote:

"I was much troubled today to see a dead man, he floating upon the water, and had done, they say, these four days, and nobody takes him up to bury him, which is very barbarous."

But if there was nothing unusual in the sight of a corpse floating in the seventeenth-century Thames, the discovery of any but the most ancient human bones in or near the river today is an extremely rare occurrence. There are, of course, exceptions, and under this heading may be classified a remarkable and dramatic find that was made early in the nineteenth century. Nearly fifty years later, in May 1859, a small brass knife-handle was exhibited at a meeting of the British Archaeological Association, but although amusingly moulded in the shape of a man and woman in Stuart costume, the object aroused little interest. Nevertheless this handle was the only surviving relic of one of the riverside's most fascinating mysteries.

On the bank of the Thames at Fulham stood a fine Georgian villa, demurely screened from the river by a row of weeping willows. Its gardens, which stretched down to the water's edge, were planted with innumerable trellised roses and so gave the house its name of Rosebank. One can well imagine the horror of the respectable household when a gardener announced that a skeleton had been uncovered in one of the flower-beds. To make the situation even more piquant, further investigation revealed the rusted remains of

a knife thrust between the ribs. The finders of these gruesome relics were convinced that they had uncovered the victim of a foul murder. Their peace of mind was not improved by the discovery soon afterwards of another skeleton which had been interred without its head. Sometime later two more burials were exposed in another part of the garden. However, the evidence of the knife, which was undoubtedly of seventeenth-century date, showed that the skeletons were not the victims of a recent mass murderer but had lain in their unorthodox graves for rather more than a hundred and fifty years.

The stock questions of every modern detective were equally pertinent in the early nineteenth century—when, how, why and by whom was the crime committed? These always suppose, of course, that a crime was committed in the first place. The first question in this case has already been answered. The knife was of a type well known in the mid-seventeenth century, and so it would be reasonable to assume that at least one of the bodies had been buried between about 1630 and 1670. The answers to the other questions might help to provide a closer dating. The problem is more interesting than important, but it is one that provides an excellent example of the way in which the questions and deductions of an archaeologist parallel those of the police detective.

We must bear in mind that the skeletons were found about a hundred and fifty years ago, at a time when archaeologists were more acquisitive than inquisitive. The remains were not carefully and scientifically uncovered, and it is quite probable that the few recorded details were garnished with the romantic notions of the finder. It is possible, for example, that the decapitated skeleton had in fact been interred in its entirety and that the skull became detached long after burial. This could well have occurred while preparing a flower-bed or perhaps during the laying of a drain. A modern archaeologist would have been able to satisfy himself on this count by a careful examination of the overlying soil—but not so the

late Georgian antiquary. It is equally possible that the tell-tale knife-handle was not deliberately thrust into the ribs of the first skeleton, but had fallen into that position after the iron blade had rusted away. Although one would normally refrain from venturing an opinion on the strength of evidence that is so readily suspect, it can do no harm in this case to accept it on its face value.

The two remaining burials were said by one writer to have been found with daggers beside them, but as the weapons were never produced it seems likely that these were no more than a literary embellishment. It was also claimed that coins were found near the bones, but these, too, were never exhibited. It was explained that they had remained for many years in the finder's cabinet and had eventually been given away to some person or persons unknown. We are therefore back where we started, with four human skeletons having only three heads between them, and a single clue to the mystery—the brass knife-handle.

There was apparently no question of the site's ever having formed part of a churchyard, and so one may safely infer that all four bodies were buried under exceptional and unusual circumstances. These could have arisen for a variety of reasons. The bodies may have been disposed of in a hurry to avoid detection. They might have been medical specimens on which a doctor had practised post-mortems, and, having finished his work, found the bodies an embarrassment. It is also possible that for some reason the bodies were refused burial in consecrated ground. The fact that the evidence indicates that the skeletons are more likely to have been the victims rather than the perpetrators of a crime makes this last suggestion improbable. The only remaining explanation could be that they were buried under war conditions, and on the whole this would seem to be the most reasonable. The theory is supported by the fact that on two occasions during the Civil War Parliamentary forces were encamped

on the river-bank at Fulham. The first time was in 1642, when the renegade Earl of Essex threw a bridge of boats across the river to thwart any move by the Royalists who were ensconced farther up-stream. The second occasion arose five years later when another Roundhead army camped at Fulham.

Even if one accepts this explanation, the problem of identifying the bodies and accounting for their death still remains. These questions will never now be completely answered. One can only make wild guesses—a practice to be deplored. It could be that the two skeletons, said to have been found with their weapons beside them, were those of Parliamentary soldiers who died of their wounds and were reverently interred outside the camp. The gentleman who received the knife in his ribs may have expired as a result of a soldiers' brawl, and his headless neighbour might have been an executed Royalist prisoner, or even a Roundhead who suffered the same fate. In this way the jig-saw puzzle can be made to fit together. But whether the pieces are correctly placed will always remain doubtful.

After the battle of Edgehill in 1642 the Royalist forces began to move on London. Banbury and Oxford were retaken and on 12th November Prince Rupert sacked Brentford. It was at this time that the Earl of Essex was encamped at Fulham. The massacre at Brentford is vividly recalled by the following lines from Abraham Cowley's *Poem on the Late Civil War*.

Witness, thou Thames, thou wast amazed to see
Men madly run to save themselves in thee;
In vain, for rebels' lives thou would'st not save,
And down they sank beneath thy conquering wave.

This may not be exceptional verse, but it serves to remind us of the reason for the discovery of so many leaden musket balls on both the Surrey and Middlesex shores at Brentford.

This stretch of the foreshore has yielded numerous relics of the seventeenth and eighteenth centuries, for, as with London, the river served as a communal rubbish tip for each and every village along its banks. One might have expected to find weapons and equipment lost during the attack on Brentford, but the available records do not show that any have been found. This could be accounted for by the fact that until quite recently little interest has been shown in what antiquaries would describe as comparatively modern finds. Such thinking was particularly prevalent in the nineteenth century, when most of the river finds were being made. It is therefore possible that many post-mediaeval relics were found, but subsequently discarded as being of no importance. Such an attitude is rarely found today; but so far as Thames relics are concerned, enlightenment has come rather late.

In the London reaches seventeenth-century weapons are rare, and when they are found the events of history have ensured that they are more likely to be relics of some sordid scuffle in a dark alley than of a heroic defence of king or country. London's suffering during the Civil War and under the Commonwealth could perhaps be paralleled by that of Paris during the recent German occupation, the principal difference being that in London there were many more supporters of the new régime than there were collaborators in Paris. It was a time of religious and political persecution, of curfews and petty restrictions. No one was surprised to learn that friends had been arrested while praying in church on a Sunday morning. But worse than the fear of arrest was the doubt that existed between brothers, friends or husbands and their wives, none knowing who might betray them, always afraid that some careless word might be overheard by an informer and used against them. The citizens were robbed of their entertainments, things of beauty were destroyed and churches desecrated. Where once the rebels had claimed to shout with the voices of the people, they were soon replacing

the monarchy with corruption and oppression wrapped only in a thin cloak of religious zeal.

Although there are many stories of Londoners and their lives during those troubled times, one tale of the river is so remarkable that it smacks more of fiction than of fact. Among the many political prisoners who were condemned to death under the Commonwealth was a certain Sir Lewis Dives who, on the night before his execution, found himself under strong guard at Whitehall. The building in which he was confined backed on to the river. But the presence of the six musketeers who formed his guard seemed to ensure that there could be no question of his making a dash for freedom. But Sir Lewis was well aware of the plumbing arrangements in river-side buildings, and realized that only by a visit to the closet would he be rid of his captors. In some cases the lavatory was housed in a room projecting over the river, while in others a wide chute passed out through the wall of the building. History does not record to which one of the two Sir Lewis was taken, but we do know that it was situated at a height of two storeys above the river. Luckily the tide was in when the worthy gentleman made his undignified escape down the waste exit. In mid-winter and in pitch darkness he swam down-stream until he found a boat in which to hide. Eventually, after a series of adventures that would delight any novelist, Sir Lewis reached France and joined the ever-growing band of Royalist exiles.

The Civil War and Commonwealth eras, although milestones in English history, did not last for any great length of time, and therefore it is too much to expect that many of the river's treasures should bear the stamp of dictatorship. If we were to look round a kitchen of twenty years ago, there would be little to distinguish the knives, forks, pots, pans, glasses or china from those that are in use today, yet most people will agree that the last two decades have been among the most eventful in British history. There are, of course, exceptions,

for we do have various commemorative utensils such as Jubilee and Victory mugs, Festival of Britain spoons, Coronation glasses and so on, all of which can be accurately dated. A few comparable relics have survived from the seventeenth century. During the Commonwealth and Restoration phases slipware pottery gained in popularity, and many jugs, bowls and even chamber-pots were decorated with pious sentiments, political slogans or indecent exhortations. Quite a number were dated, as, for example, is a small jug in the Guildhall Museum which bears the inscription "The Gift is Small, Good Will is All. 1659." Fragments of similar pots are often to be found on the foreshore, but the chances of finding a sherd with the date on it are naturally very remote. Broken glass wine-bottles are comparatively common in the river, and every now and then a complete example turns up. These vessels first came into general use under the Commonwealth, and many owners identified their bottles by glass seals attached to the bodies bearing their initials, arms, or, more commonly, the sign of a tavern.



25. Wine-bottle seal made for Thomas Padnoll of the Sun Tavern, New Fish Street. From Billingsgate foreshore. c. 1650-60. ($\frac{1}{2}$)

The illustrated example (Fig. 25) was found on the shore near London Bridge, and had clearly belonged to a Sun tavern whose licensee had the initials "T.P." The records of the Vintners' Company soon identified the owner as one Thomas Padnoll, licensee of the Sun in New Fish Street, whose name appeared in the Poll Tax list for 1641. There can be little doubt that the seal is a relic of Commonwealth London.

Coins minted between 1649 and 1660 are not common in the Thames owing largely to their extreme thinness and small size. The more substantial higher denominations of this

period, or for that matter any other period, are rarely encountered. Remembering that the shores have been searched constantly over the centuries, it is hardly likely that many gold broads, silver crowns or half-crowns have been left for us to find today. One of the most interesting Commonwealth coins yet recovered was found by a mudlark of the old school while augmenting his income by recovering scrap metal. The coin is of pewter, bears the bleak cross of the Commonwealth and on one side the legend " $\frac{1}{4}$ Ounce of Fine Pewter", and on the other "For Necessary Change". This is known as a *pattern*, for the coin was never put into circulation. It was one of a number of each design which were circulated among people concerned with the coinage, tested for durability and so forth. The need for new and larger coins in the lower denominations was very real at this time, for there were no copper pennies, halfpennies or farthings. Merchants therefore took the law into their own hands and issued private tokens of reasonable size which bore in the legend the name and address of the issuer, as well as the value and often the date. Every numismatist knows these tokens well, and some collect nothing else. But the London archaeologist and historian is not concerned with them as coins but as an unrivalled source of names and addresses of long-dead citizens. Many belong to the years preceding the Great Fire and so give information that cannot be found elsewhere. From those found in the Thames we learn, for example, that Thomas Sprattling was a bridle-maker at Cow Cross in 1666, that in the same year Isaac Mardock, an oilman, lived in Suffolk Street, and that in 1667 Mr. Bartholemew Fish resided at Queenhithe where his token was found. The reader may think that there is nothing romantic or exciting in discovering the names and addresses of dead and unimportant people. But even the most cynical must admit that there is a fascination about a small token bearing the simple legend "At the Black Bull in Pudding Lane" and the

initials W.I.P., the initials of a man and his wife who, in 1666, must have lost everything they possessed, for it was in Pudding Lane at the house of Mr. Faryner, the king's baker, that the Great Fire began.

But before the citizens of London could undergo their ordeal by fire they had to suffer the ravages of the plague. So appalling were its effects that many people welcomed the flames as the most effective means of cleansing the unwholesome City. The disease was first detected in the autumn of 1664, when it appeared in Westminster. However, the severe winter of that year must have served to keep it in check, for it was not until May, 1665, that the plague began to spread. The death roll jumped from 43 in May to 17,036 in August, and to 31,159 in September, and in the whole year numbered more than 68,000 out of a total population of about 460,000 souls. Of those who escaped it is estimated that approximately two thirds fled before the plague reached its peak. London must have become virtually a city of the dead.

There are various eye-witness accounts of life in London at that time, but few have much to say concerning the river. Trade was more or less at a standstill, for no ships would risk the chances of contagion. The most graphic account of the disaster is to be found in Defoe's *Journal of the Plague Year*; but although giving a fair picture of those days, much of the narrative is necessarily fictional. The author was only seven at the time of the plague, and the journal was not written until 1722. Defoe tells how, when walking by the river at Blackwall Stairs, he encountered a waterman who was living aboard his boat, being too afraid to sleep in his own house lest he should catch the disease. How, asked Defoe, did the man manage to make a living when no one wanted to travel by water? To this the waterman replied:

"Do you see there," says he, "five ships lie at anchor, and do you see," says he, "eight or ten ships lie at the

chain there, and at anchor yonder? All these ships have families on board, of their merchants and owners, and suchlike, who have locked themselves up and live on board, close shut in, for fear of the infection; and I tend on them . . . and do what is absolutely necessary, that they may not be obliged to come on shore; and every night I fasten my boat on board one of the ship's boats, and there I sleep by myself and, blessed be God, I am preserved hitherto."

Eventually the man agreed to take Defoe in his boat to Greenwich, where many more vessels were being lived on in the same way. There were, wrote Defoe, ships anchored all along the river from Ratcliffe to Long Reach with some ten thousand people "sheltered here from the violence of the contagion, and lived very safe and easy". In this way the river played its part in the story of the Plague Year.

Although the death roll dropped in the autumn of 1665, the plague had not yet come to an end, and in the following year it was to destroy another 2,000 people. It was this sometimes overlooked fact that caused some people to see in the subsequent fire a heaven-sent blessing in disguise.

The first orange flame licked out into Pudding Lane at about 1 a.m. on the morning of Sunday, 2nd September, and fanned by a strong wind it soon blossomed into a vivid, red glow that lit up the night sky. Pepys was called to a window of his house in Seething Lane, but he thought it far enough away to be of little danger and so returned to bed. However, the fire could not have broken out in a more unfortunate area, for it started among tightly packed timber buildings, many of which served as warehouses for wines, tar and oils. The wind quickly blew the flames along Thames Street towards the Bridge, where they soon engulfed the great wheel which supplied water to that quarter of the City. Having achieved this major tactical victory, the wind veered a little

and blew the fire up New Fish Street towards the Royal Exchange and Guildhall.

Although fires were comparatively common in London, no efficient fire-fighting force was in existence, and the only available equipment consisted of ladders, buckets, iron hooks for pulling away burning timbers, and hand squirts resembling large garden syringes. It is little to be wondered at that the citizens busied themselves more with escaping the flames than trying to put them out. On this Sunday morning, when congregations would normally have been gathering for morning service, the churches were filled by people concerned only with the task of stacking their valuables within the protection of the massive chalk walls. But their faith and efforts were in vain, and the churches burned as fiercely as the timber buildings around them. The water-front beside the Bridge was by now a mass of flame. Efforts were made to contain the fire by pulling down houses to the west at Three Cranes Wharf, and to the east at Buttolph's Wharf. But the blaze spread too fast for it to be imprisoned in this way. The roar of each exploding oil barrel with its attendant sheet of flame showed all too clearly that the fire would leap any gap that could be made in the short time available.

"Everybody," wrote Pepys, "endeavouring to remove their goods, and flinging into the river, or bringing them into lighters that lay off; poor people staying in their houses as long as till the very fire touched them, and then running into boats, or clambering from one pair of stairs by the water-side to another. . . . River full of lighters and boats taking in goods, and good goods swimming in the water, and only I observed that hardly one lighter or boat in three had the goods of a house in, but there was a pair of Virginalls in it."

The diarist, drawn like a moth to a candle, lay off-shore in a boat fascinated by the horror of it all. Then when he

could endure no more, he crossed to an ale-house on the Bankside where he could watch the flames in safety and comfort. Pepys was but one of hundreds of spectators who gathered on the south bank to enjoy the spectacle, among them his friend and fellow diarist, John Evelyn. The latter had come up by coach from Deptford, bringing his wife and son, and they too remained on the Bankside until the monotony of watching so many tumbling buildings and falling spires began to pall and they returned home "exceedingly astonished". On the following day Evelyn returned, and later made a long entry in his diary ending with the words "London was, but is no more!"

Most of the City's great buildings were destroyed, and a mile of the water-front was reduced to heaps of charred and smoking timbers. Although after four days the fire had run its course, the ruins smouldered on for more than a fortnight. The disaster had razed a far larger area than was to be achieved later by the Luftwaffe's bombs, and then, as now, planners talked of building a new city possessing each and every virtue. No more narrow streets, no more irregular-fronted houses leaning crazily in all directions, no more congestion along the river—the talk was all of improvements. Foremost among these visionaries were Christopher Wren and John Evelyn. But as every planner knows, it is one thing to produce a magnificent plan on paper and quite another to lay it out on ground that belongs to someone else. Evelyn put forward the bright suggestion that the débris should be shovelled into the river, thus pushing the frontage out to low water mark and enabling shipping to approach the wharves at all times. Soon afterwards he joined a certain Sir John Kiviet in a project to wharf "... the whole river of Thames, or quay from the Temple to the Tower, as far as the fire destroyed, with bricks, without piles, both lasting and ornamental". Although this plan got no further than Evelyn's earlier suggestion, Sir John began prospecting up

and down the Thames banks to see whether "... the soil about the river of Thames would be proper to make clinker-bricks".

It can hardly be doubted that the Great Fire provided the river with its greatest harvest, yet strangely enough very little has been recovered. Bricks and tiles are scattered liberally over the foreshores, and could well be relics of the disaster. Nevertheless there have been endless opportunities for people to tip barrow-loads of bricks into the river without having to destroy the entire City to do it! Occasionally one encounters fragments of burnt and twisted window-leading, some with pieces of glass still in position, and these too might be relics of the fire.

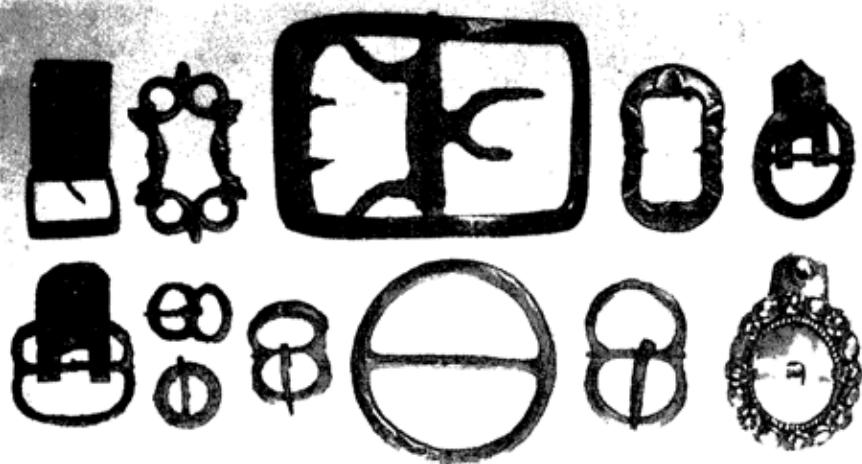
In the Coal Exchange at Billingsgate is preserved a massive, carved oak timber marked by tell-tale charring that may well have come from a house gutted in the holocaust. The exact circumstances of this discovery are obscure, but the timber is generally supposed to have been pulled up from the river-bed by a dredger. The relic is now housed in the specially built cellar that contains the Roman foundations mentioned earlier. Not a stone's throw from the Coal Exchange stands the Cock Tavern, and on the wall in its doorway hangs a glass case containing another possible fire relic. The object is part of an iron fire-back, now in an appalling state of preservation, but which can still be seen to bear a crest and coat-of-arms with two trees as bearers, the initials W.M., and the date 1586. This rusted and fragmentary treasure is said to have been found during excavations in the bed of the now vanished Billingsgate Dock. Assuming that the fire-back once belonged to a building in this area, there is every reason to suppose that it would have served its original purpose until the fire destroyed the house.

Viewed even in the most charitable light, one charred timber, a rusted fire-back and a scattering of bricks and burnt glass are a poor return for a calamity that destroyed the

whole of the City's waterfront and burned down some thirteen thousand houses, as well as eighty-seven churches and other public buildings. Where, one wonders, did all the *débris* finish up? The amount that went into the river was undoubtedly quite small. The answer must be that the houses were more combustible than they are today, with the result that many burned practically to nothing. Wherever possible the *débris* was levelled off and new houses built over it. Some of it was taken away to use as hardcore to fill holes, while a deal more was deposited on marshy ground along the river banks. This redeposition of *débris* and soil from the City has given rise to numerous archaeological blunders.

During post-war rebuilding by the river at Limehouse, workmen recovered numerous fragments of Roman pottery which, at first glance, suggested that they had discovered the site of a Roman settlement. But when skilled archaeologists visited the site they soon spotted the sixteenth- and seventeenth-century pottery protruding from the side of the excavation underneath the layer containing Roman finds. The problem was then solved. At some time after the middle of the seventeenth century, perhaps following the fire, a builder digging foundations for a cellar in the City sent his excavated earth to be dumped on the unstable ground at Limehouse. As his men started to dig they naturally removed the top layers first, and so the Great Fire *débris* was piled into the first carts that set out for the Limehouse site. Meanwhile the builders continued digging until, at the bottom of their hole, they came to the *débris* of Londinium. This went into the last carts, and when it reached Limehouse was deposited on top of the dump. In this way the all-important layers finished up in the reverse order.

More difficult to spot are cases in which the redeposited soil contains relics of the same date as are to be found in the undisturbed ground around it. This may seem a little complicated, but the following example should make it



XXVI. Belt, shoe and spur buckles of brass, iron, pewter and silver. From Queenhithe foreshore. Fifteenth to eighteenth century.

XXVII. Brass reliquary. From Wapping. Late fifteenth or sixteenth century. *Guildhall Mus.*

XXVIII. German duelling dagger with hilt inlaid in gold and silver. From Wandsworth. Sixteenth century. *Guildhall Mus.*





XXIX. Double - handed sword. From the Temple. Fourteenth century. *Guildhall Mus.*



XXX. Axe with maker's triangular mark on the blade and with original wooden handle. From the Queenhithe foreshore. Seventeenth century.

XXXI. Rhenish stoneware "witch-bottle" containing iron nails and a cloth heart pierced by brass pins. From Paul's Pier Wharf, c. 1670. *Guildhall Mus.*



clear. During building work on the Bankside in 1949, workmen began to turn up quantities of broken and unfinished pottery along with the *débris* from potters' kilns, all of which suggested that they had discovered the site of a pottery which had been operating in the late seventeenth century. This seemed to be the logical answer—but it was not the right one. It was soon apparent that the finds were of two entirely different types, tin-glazed "Lambeth" Delftware and the mottled, brown stoneware attributed to the factory of John Dwight in Fulham. It was inconceivable that the two should have been produced together. As the work went on it was discovered that the kiln waste was no more than hardcore deposited from elsewhere. Had it not been for the curious juxtaposition of the differing wares, and the discovery of its being used as packing behind walls and in the lining of drains, the site might well have gone down in the records as having been occupied by potters at the end of the seventeenth century.

With this lesson still fresh in my memory, I was more than chary when similar finds began to turn up along the river foreshore between Cannon Street Railway Bridge and Queenhithe Dock. Here, too, were discovered innumerable fragments of unfinished Delft pottery and their attendant kiln *débris*. This time there were very few traces of the Fulham products, but even so there can be no doubt that I was dealing with more hardcore brought, perhaps, from potteries at Gravel Lane, Tooley Street or even from Lambeth itself.

Potters' *débris* does not provide the sole evidence of industry to have been found in the river, and two other trades are well represented on the Queenhithe-Cannon Street Bridge foreshore. These are respectively, and quite unconnectedly, pin-making and the wool trade. On this stretch one can find more pins than anywhere else, and with them, from time to time, are discovered the characteristic "pinners' bones" which were used in their manufacture. There are pins

reaching five inches in length and others measuring no more than half an inch and little thicker than a hair. Between these extremes are scores of variants, some with thick shanks, some with thin, some with large heads and others with small, but all of brass and all handmade. With them are often found short lengths of pinners' wire, and occasional hooks and eyes made from this material.

Determining the date of a pin is a difficult business. They are said to have been introduced into England by Catherine Howard, but archaeological evidence has proved that they were in use by 1500 at the latest. At the other end of the scale we know that pins continued to be made by hand until the early nineteenth century, when an American obtained a British patent for a machine that made pins with heads stamped from the shank. It would seem that until this time pin heads continued to be made by twisting a second piece of wire round the shank.

Before the days of the brass pin, they were of iron with heads of decorated pewter or brass. It would have been a pin of this kind that Chaucer mentions as a love token in his *Miller's Tale*, saying: "He sent hire pinnes, methe, and spiced ale." One or two of these early pins have turned up among mudlarking treasures, but they are comparatively rare. The brass pins of the sixteenth century are more common, some of which have large, lead heads enclosed in thin brass casing. Many of these were imported from France, and some even from as far afield as Milan. By the close of the sixteenth century their value had dropped considerably and they were selling at about a penny a hundred, and so gave rise to Hamlet's cry: "I do not set my life at a pin's fee."

One often wonders why pins were considered so important in the seventeenth and eighteenth centuries, and why women should have been so concerned with their "pin-money". The clue is provided by an eighteenth-century dictionary definition which describes a pin as: "A small brass utensil for

fastening on clothes in dressing." It would seem that female attire was largely held together by pins, a practice which must have been both precarious and injurious, for none were of the safety variety.

Among pins scattered on the foreshore are often found small brass cylinders, some of which are embellished with a stamped decoration. For a long time their purpose remained a matter for debate, until one day an example turned up with two small pins thrust into it. The answer was then perfectly clear. The cylinders were pin cases or sheaths, made to take one or sometimes two pins, so that they could be safely carried in the pocket until needed. This may perhaps be the origin of the phrase "for two pins".

Before leaving the humble pin we must not forget its one exciting and dramatic association, for even today pins play an important part in the dark rites of witchcraft. In 1926 a mudlark searching the foreshore at Paul's Pier Wharf, east of Blackfriars Bridge, spotted the body of a pottery bottle protruding from the mud (Pl. XXXI). To his delight he found that apart from the loss of its handle and a crack in the body, the vessel was intact. He bore his find triumphantly home, extracted a lump of clay from the neck and proceeded to wash the inside under a tap. As soon as he tipped his bottle up, out dropped a number of rusty iron nails, a small quantity of dank hair and a number of brass pins. After fishing about inside with a pair of tweezers the mudlark extracted a tattered piece of felt cut in the shape of a heart and pierced by pins. Although he was not at first aware of it, he had discovered one of the seventeenth century's most fascinating relics—a witch-bottle.

This was not the first of its kind to be found near the Thames. Two examples have been discovered at Westminster, one in Lambeth and another in Stepney. But it was, so far as is known, the first to be recovered from the river-bed. A number of these charms have been found outside London,

mostly in East Anglia, where they have been found buried beneath hearths or under thresholds. But in London the evidence points to their having been thrown principally into streams running down to the river.

The bottles were sometimes used by witches to cast spells, but more often they were employed by ordinary folk as a defence or even a counter-attack against them. The principle was roughly as follows: through her spells the witch was considered able to poison the body of her victim, but in doing this it was thought that some of her own blood accompanied the poison. The victim therefore put into a bottle cuttings from his own hair, parings from his fingernails and with them went the symbolic heart pierced by pins, along with a number of loose pins or needles and a few iron nails. The bottle was then filled with urine and sealed. It was thought that the personal ingredients would contain some vestige of the poison and with it a percentage of the witch's blood. Once sealed in the bottle it was believed that the spell would rebound on to its progenitor. In most cases it seems likely that the bottles and their contents were intended as preventives, rather than cures for persons already bewitched. This would account for the bottles being hidden under doorways and near chimneys, the latter being the witch's traditional means of entry. It was hoped that any spell would be drawn into the bottle and not to the intended victim. The Thames example, however, may well have belonged to the first category. It would certainly gain a greater romantic interest if we can think of it as a genuine, spell-filled bottle which was thrown into the river to save some poor bewitched Londoner.

The bottles themselves are of interest, for they are generally of the type colloquially known as "Bellarmine". These vessels were manufactured in huge quantities in the Rhineland, many of them specifically for the English market. They take their name from the popular fallacy that the bearded

faces stamped on the necks were intended to represent the features of a much disliked Cardinal whose name was Roberto Bellarmino. But in actual fact these bottles were being made some years before Bellarmino obtained either fame or notoriety. Innumerable fragments of these bottles have been found in the Thames although, not surprisingly, intact examples are rare. Nevertheless the broken pieces can make an interesting field of study. Many varieties of bearded faces are to be found, the earliest resembling satyrs rather than human beings. The body of such a vessel is decorated with a moulded medallion representing the coat-of-arms of a family or a town, and on some we find the date worked into the motif. Among the most common are the arms of Amsterdam and of the family of Cleves-Burg, but occasionally one encounters an example bearing the royal arms of Tudor England. Bellarmine bottles were made from about 1550 until the close of the seventeenth century, but during the last fifty years their quality declined rapidly; the once elaborate medallions degenerated into meaningless patterns and the bearded faces became more and more grotesque. Strangely enough all the Bellarmine witch-bottles are of this late type, and it is just possible that the semi-human faces were used to symbolize the witch as a bearded hag.

Returning now to less sinister river finds; none are more important, or in their own way more interesting, than the relics of England's wool trade. The law demanded that every bale of cloth should be affixed with the seal of the merchant, fuller, dyer and of the official searcher, thus ensuring that the material came up to standard; and that if it did not, the buyer would know whom to blame. The seals were of lead, and have been found in their thousands on the foreshore between Queenhithe Dock and Southwark Bridge. Smaller quantities have been found along the Bankside and at Billingsgate. But nowhere else in England have they been so plentiful as at Queenhithe. Hundreds upon hundreds of unique examples

have been found in that small area (Fig. 26), and these have opened up a fascinating field of study that is as yet not fully understood.

From the early Middle Ages, and indeed even in Roman times, wool has been one of Britain's greatest money-spinners. In the reign of Henry II London was given the sole right of exporting woollen cloth. Edward III made a point of wearing



26. Lead cloth-seals: 1-2, Probably early Tudor; 3, Dwite of Colchester, probably late sixteenth to seventeenth century; 4, Elizabethan searcher's seal; 5, Merchant's mark (Dowgate?); 6, "Worsted Reformed"; 7, "Faultie"; 8, Arms of the Mercers' Company; 5-8, Seventeenth century. All from Queenhithe foreshore. (2)

English woollen fabrics and so can claim to be numbered among the world's most august mannequins. But more important were his practical efforts to build up the English cloth industry. He imported Flemish weavers, fullers and dyers, and finally banned the export of raw wool to ensure that it was turned into cloth here in England. Unfortunately this was not a workable proposition, and although future

monarchs followed the same prohibitive policy it was never effective and was eventually abandoned by Elizabeth I. In 1660, however, the ban was again imposed; and, among other encouragements to the weavers, Charles II brought in a law requiring that all bodies should be buried in woollen shrouds—a novel if depressing sales incentive.

In 1714 a new statute was produced in which the bale seals were specifically mentioned, saying that all broadcloth sold in England must be “stamped with the watch-measure thereof on the seal of the master, owner, occupier or millman of the fulling mill”. The statute then goes on to forbid the sale of cloth without seals bearing the foregoing name or names, “together with the contents of the said cloth in length and breadth, and marked with the distinguishing mark of the crown . . .”.

The seals generally consisted of two discs of lead joined by a narrow strip and folded together, one disc having a hole in the centre and the other a tongue. A small hole was made in a corner of the cloth, the tongue passed through it and the second disc was folded over. The seal was then squeezed with a pair of pincers, or struck between a pair of dies in the same way that coins were minted. In either case the tongue was flattened and both sides of the seal were impressed with lettering and a coat-of-arms, or some comparable device.

It is not yet known how early these seals first appeared. But the present claimant for that honour is a series of seals made from lead tubing, squashed flat, and stamped with crowns, letters or Roman numerals (Fig. 26, 1–2). It has been suggested that these seals may date from the fourteenth century, but the presence of an occasional stamped Tudor rose indicates that some if not all are a good deal later. Another variety is spade-shaped (Fig. 26, 4), has a single or double tongue and has its legend on one side only. At the top of the spade are two rows of figures thus: XVII
XVIII and under them the word

SEARCHED—often misspelt. This is clearly an aulnager's or aulnegeor's seal, that worthy being an officer of the king responsible for the assize of woollen cloth who (according to a dictionary of 1671) "... hath two Seals ordained him for that purpose". One of these aulnagers who used a rectangular seal was helpful enough to have his name engraved on his official matrix, and so on his seals we find the words "Searched—Richard Nash". Some of his seals are double-tongued, and this is generally assumed to be a sixteenth-century characteristic. Fastened in the same way are the seals of a Mr. Dwite, or Dwight, of Colchester who has the honour of being the originator of the largest seals yet found (Fig. 26, 3). Whereas most seals are about the size of a halfpenny, his are rather more than an inch and a half in diameter.

Once into the seventeenth century the problem of dating becomes much easier, for many of the seals are excise stamps bearing the arms and initials of the reigning monarch. Some go farther and add the date and the name of the town or county from which they come. In the reigns of James II and Queen Anne they go even farther still, and include the royal portrait as well. The excise seals are normally in four parts, the first disc having the tongue and the last the hole.

The cloth-seals are among the most tantalizing of the river's treasures, for they have a geat deal to tell us if only we can learn to interpret their significance and decipher the cryptic lettering. A typical example is provided by a halfpenny-sized seal bearing on one side the arms of the Mercers' Company (Fig. 26, 8) and the letters E.R.C.G. Two examples of this seal have been found, but on the back of the first are stamped the letters A.G. and on the other R.A. Are these, one may wonder, the initials of the people who applied the seals or have they some more complicated explanation, like the example bearing the letters BH CCMD MDPH S? One merchant's seal reads DOW, and beneath it is shown a



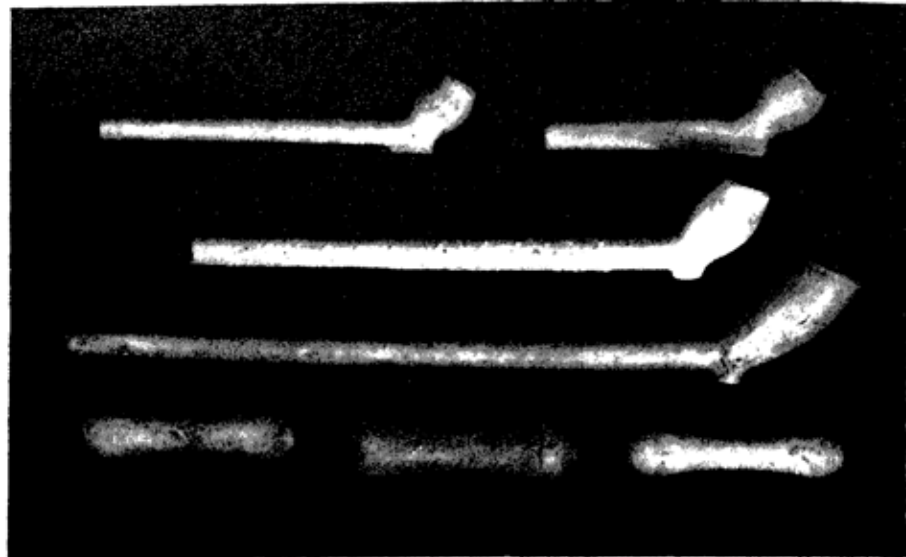
XXXII. Model petronel, ramrod and moving parts missing. Queenhithe. Late sixteenth century. *Photo: John Vickers.*

XXXIII. Model of dog in red pottery. Queenhithe. Elizabethan. *Photo: John Vickers.*



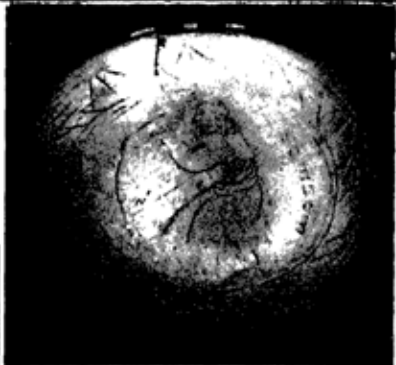
XXXIV. Model lion in pipe-clay. From Queenhithe. Sixteenth to seventeenth century. *Photo: John Vickers.*





XXXV. Clay tobacco-pipes and pipe-clay wig curlers. From Queenhithe. Seventeenth century. *Photo: John Vickers.*

XXXVII. Pewter measure. Late sixteenth to seventeenth century. *Guildhall Mus.*



XXXVI. Dutch brass tobacco box. From Queenhithe. Late seventeenth century.

XXXVIII. Pewter coffee cup. From Queenhithe. Early eighteenth century.



picture of a gate (Fig. 26, 5). Can this be a reference to Dowgate Hill, which rises not a hundred yards from where the seal was found? Another unique seal (Fig. 26, 7) has on it the grim word FAVLTIE, and one wonders what became of the bale to which this mark was attached? Thousands of questions are waiting to be answered, and not the least of them is the problem of why so many seals should be found in the river together, some of them never having been used.

The river's leaden relics seem to provide a constant source



27. Lead tokens of the seventeenth and eighteenth centuries. From Queenhithe. (3)

of puzzlement. Even more infuriating than the cloth-seals is a group of lead tallies or tokens (Fig. 27). A few discs about the size of a halfpenny had turned up from time to time, and although they were ornamented with letters and patterns they had attracted little attention. But one day in 1950, after a heavy tide, a black patch of mud was exposed close to the north end of Southwark Bridge. Protruding from it, like fruit from a Christmas cake, was a collection of these tokens, each stamped with strange and apparently meaningless designs. With them lay a well-preserved sixpence of Elizabeth I,

dated 1566. It was thought when these finds were made that the sixpence and the lead discs had formed the contents of a purse and were therefore contemporary. It therefore seemed reasonable to assume that all the other lead tokens were also relics of the Elizabethan era. This proved to be quite wrong. During the following two or three years hundreds of lead tokens turned up along the Queenhithe-Southwark Bridge foreshore, and among them were examples bearing the dates 1633, 1707 and 1714.

The tokens were cast in moulds and not struck or otherwise impressed, and it is not unusual to find two or more derived from the same mould. The majority were adorned with simple crown, fleur-de-lis, star or anchor designs. Some are more elaborate and make use of the ever popular arrow-pierced heart motif, while others closely resemble the brass and copper monetary tokens of the seventeenth century. Under another category belongs a series of tokens showing a wine-glass (chalice?) and a bottle. From the shape of the vessels it is fair to date them to the late seventeenth and mid-eighteenth centuries. They are generally assumed to have religious associations and are known as "Communion Tokens". Recently, however, a similar disc has been found bearing the initials E.C., a wine glass and a tobacco pipe. It is almost certain that this is a tavern token, in which case it is reasonable to wonder whether the glass and bottle tokens have been incorrectly identified.

The layman may perhaps feel that he cannot care one jot or tittle whether we are able or unable to identify a heap of useless lead discs. It is perfectly true that these relics are not the most romantic of the river's treasures, but nevertheless they are important and it would be shirking the issue to leave them out.

In many cases tokens and coins of the softer metals, notably lead and pewter, have been so badly defaced in their passage from hand to hand and subsequently as a result of

water action that it is practically impossible to arrive at an accurate identification. This was true of a pewter coin a little smaller than a penny which turned up in 1952 on the Billingsgate foreshore. Worn practically smooth on both sides, it seemed to be of little interest and so was stored away in a box labelled "Unimportant & Unidentified". A few days later a second and similar coin was found at Billingsgate whose slightly better condition enabled an equestrian figure to be discerned on the obverse. While this feature alone was not sufficient to identify the coin, it clearly showed that this was no common English variety. A month went by before a third coin was found on the same shore, and luckily this example proved to be reasonably well preserved. The legend IACOBVS II.D.G.MAG.BRIT.FRAN.ET.HIB.REX. identified the mounted figure as that of James II, while the reverse inscription proclaimed the value as being a twenty-fourth part of a Spanish real. The problem was now solved, for these were rare but well-known official tokens issued for circulation in the colonies. Used primarily in the West Indies and the southern American colonies, they retained the earlier Spanish currency denomination, the real then being worth sixpence and thus giving these pewter tokens the value of an English farthing.

The American association at once gives the tokens a fascination denied the majority of coins from the Thames. Here we have a direct link with events beloved of every schoolboy, tall ships braving the Atlantic to trade with Indians in Virginia, exchanging broadsides with Spaniards and pirates in the blue Caribbean. Who knows what adventures may be wrapped in the history of these three coins? Their presence in the river, however, is not difficult to explain, for in all probability they represent part of the contents of a sailor's purse lost overboard from a ship loading or unloading in Billingsgate Dock.

In 1677 a London ship sailing to America to bring back

tobacco took on board various commodities for trading to the Indians, and on arrival the captain purchased a strip of land from a local chief on which to build a warehouse. Payment was made in kind and amounted to a hundred clay tobacco-pipes and twenty Jew's trumps. It so happens that a number of trumps, or harps as we know them today, have been found in the Queenhithe foreshore, so too have innumerable shattered clay pipes. It was therefore suggested that the ship may have taken on her cargo while lying at Queenhithe. It is an intriguing theory, but one that does not hold water for a moment. We have already seen that ocean-going shipping no longer ventured above London Bridge, while the clay pipes are plainly no more than the City's refuse. Had they been intended for export they would have been packed in ozier baskets and so if dropped in the river, would have been carried away from Queenhithe by the tide. However, it is just possible that the Jew's harps were loaded aboard lighters at these wharves on their way to shipping anchored below the bridge.

If we are afraid to give way to our imagination, the river's treasures must inevitably remain dull and lifeless, for it is only in our minds that they can be transported from soulless museum cases back into their original settings. In trying to achieve this some relics are more helpful than others. Most of the coins, for example, lie in their cabinets, snug and inarticulate, having passed through innumerable hands yet retaining no evidence of their journey. But there are other river finds whose very nature gives some idea of their history and the part they played in the lives of their owners. Take a pewter tankard like the example illustrated in Plate XXXVII; one can obtain much quiet enjoyment by attempting to conjure up mental pictures of the people who once drank out of it.

Two pewter tankards, complete with hinged lids, have been found in the river. The first is in the Guildhall Museum,

and is said to date from the late sixteenth or early seventeenth century. On its lid are stamped Tudor roses and the letters G.E. and G.T.T., while an owner's initials are roughly scratched on the body. The reason for its being thrown away is painfully obvious. The tankard had ended its career by falling into a fire, with the result that the rim melted and ran away down the side. It is not difficult to imagine its owner quietly drinking himself into a stupor by the fireside. Then, when he finally succumbed, his arm fell to his side knocking the tankard from a stool on to the hearth, where it lay with its rim in the hot embers. The second tankard, or "measure" as they are generally called, was found in 1850 near the site of Old London Bridge. Although its whereabouts is not now known, the description is similar to the first example, save that the cover was stamped with the fleur-de-lis in place of the Tudor rose. Engraved on the body was the name *Flemming*, and it is not impossible that this was the William Fleming who issued a token in 1668 at the sign of the Three Corn Porters in Stoney Lane, Southwark.

If a beer tankard may be deemed to have a human and personal interest, then the objects from a lady or gentleman's dressing-table must have an even greater piquancy. Oddly enough such things are often to be seen in the Thames. Small Delftware pots that held cosmetics, green glass phials that may have contained anything from perfumes and love potions to prosaic laxatives, even combs, hairpins, and wig-curlers—are all to be found in the river. The pots and bottles are the most common and many of them survive unbroken, for unlike domestic crockery they were often thrown away once emptied. Combs are always intriguing though difficult to date, being made of bone, horn or wood, and of a standard pattern that changed little through the centuries. They were normally about three inches in length and, unlike those that we use today, the large teeth were on one side of the spine and the small on the other. The Queenhithe area may, per-

haps, have held a combmaker's establishment, for fragments of unfinished bone combs have been found on that foreshore.

In the lusty days of Elizabeth male hair was worn short, but early in the seventeenth century it became fashionable to grow it longer. It was in France that the periwig first appeared as an adornment, and as Louis XIII grew prematurely bald he was not slow to set the fashion. Such frippery could hardly have been popular during the Cromwellian era, and so the wig did not come into general use in England until the return of Charles II from his exile in France. At that time French fashions began to flood into the country, much to the disgust of those Englishmen who clung to the outmoded belief that men should look like men and not like a milliner's shop. But although clothing fashions changed with the wind, the periwig took a firm grip on our heads for more than a hundred years, although it grew smaller as the eighteenth century progressed. To maintain the elaborate curls that embellished the Carolian peruke, the wigs were set on dummy heads each night and the hair dressed in curlers. The curlers were made of pipe-clay and were produced in various sizes to fit the graded curls which were an essential feature of every fashionable wig. Curlers both large and small are to be found in many mudlarking collections, and more often than not they are recovered unbroken (Pl. XXXV). But even these simple hour-glass shaped objects can boast their own small mystery. Nearly all are stamped on either end with the mark of a crown, and under it either the letters I.R. or W.R. It is generally assumed that, being of pipe-clay, the making of wig-curlers was a side-line of the tobacco-pipe makers, and it has therefore been suggested that the initials are those of the manufacturers. But the theory has been advanced that the stamped curlers were made for the use of the royal court and so bore the initials I.R. (Iacobus Rex) of James II, and the W.R. of his successor William III. It has also been suggested that their makers had obtained a royal patent. Unfortunately these

attractive theories have been spoilt by the recent discovery of a curler bearing the stamp W.B.—presumably a maker's mark. It is therefore reasonable to accept the I.R. and W.R. marks as having a similar purpose.

It is perfectly fair and reasonable to expect to find damaged or worn-out objects on the river foreshores, but when complete and unbroken finds are made we must constantly ask: Why were they thrown away? How did they get into the river? The state of the foreshore today has resulted in the discovery of a disproportionate number of finds from above the Bridge. Unthinking mudlarks will inform the enquirer that the objects were lost while loading them on to sea-going ships that were berthed along the quays. But they fail to remember that no vessels of any size would attempt to pass the Bridge, and that many came no nearer to London than the Greenwich reach. Cargoes were, however, loaded on to lighters and carried downstream to the waiting ships, and it is quite possible that some losses occurred in transit. Although many finds must recall memories of unhappy events, fires, storms, mishaps at the Bridge and so on, a few must tell of lighter occasions. The gayest of these must surely have occurred in the New Year of 1683-84.

The freezing of the Thames was an event that had brightened the lives of Londoners on numerous occasions during the City's history, but never had it been used to such advantage as it was during the 1683-84 frost. The river was frozen to such a depth that a street of shops was set up on the ice, and coaches plying for hire drove up and down the river from Westminster to the Temple. The whole City turned out either on foot or driving in horse-drawn sleds to buy knick-knacks from the shops which, so we are told, were offering practically everything that could normally be bought in London. One of the greatest attractions proved to be a printing press which turned out souvenir cards bearing the buyer's name and beneath it the all-important information that it was "Printed

on the river of Thames being frozen. In the 36th year of King Charles the II." Topical ballads and poems were also printed and these sold equally well. One of the latter was *Thamasis's Advice to the Painter*, "Printed by G. Groom, on the river of Thames", from which the following lines are drawn:

"To the print-house go,
Where men the art of printing soon do know,
Where for a Teaster, you may have your name
Printed, hereafter for to show the same:
And sure, in former Ages, ne'er was found
A Press to print, where men so oft were droun'd!"

For those Londoners who wanted entertainment beyond the sensation of walking where they had no business to be, there were puppet booths, bull-baiting exhibitions, coach and horse racing and, of course, skating. The apprentices sallied forth *en masse* with the traditional bone skates strapped to their boots, and doubtless had the time of their lives. A large number of these skates have survived, but most of them have been found near London Wall and in Moorfields, where skating was a common winter pastime. It unfortunately spoils a good story to have to admit that I have not traced any that are known to have been found in the river.

If skating was the amusement of the apprentices, there were many who were still young enough to enjoy the pleasures of what Evelyn described as: "... cooks, tippling, and other lewd places, so that it seemed to be a bacchanalian triumph, or carnival on the water, . . .". The fun and games went on until the 5th February, when the beginning of the thaw made stall-holders start to dismantle their market. We can well imagine that many odds and ends were left behind in the slush, and so eventually ended up on the river-bed.

Although the Frost Fair of 1683-84 was apparently the most memorable, another occurred in 1698, during which a coach and six drove over the ice from Westminster to

London Bridge. Others were held in the eighteenth century. In January 1715-16 a news-letter stated that:

"The Thames seems now a solid rock of ice; and booths for the sale of brandy, wine, ale, and other exhilarating liquors, have been for some time fixed thereon. But now it is in a manner like a town: thousands of people cross it, and with wonder view the mountainous heaps of water, that now lie congealed into ice."

The familiar printing-presses were set up at Westminster, Whitehall and Whitefriars, with booths selling hot meals, souvenirs, tea, cheeses and tobacco. Other commodities were arranged in streets, and even silversmiths, goldsmiths and pewterers were among those who set up temporary establishments on the ice. Among the many entertainments was included a preacher who held forth to a motley congregation "with a zeal fiery enough to have thawed himself through the ice". While all this was in progress a spring tide raised the ice no less than fourteen feet without disturbing either the revellers or the preacher and his congregation.

Other Frost Fairs occurred during the eighteenth century, notably in 1739-40 and in 1788. On the latter occasion the thaw came with unexpected suddenness carrying huge lumps of ice down-stream, to the great danger of the moored shipping. The vessels sought protection by mooring to wharfs and buildings along the banks. But even these measures were not always proof against the weight of the ice. A ship moored to the main beam of a house at Rotherhithe was drawn away under the pressure, towing the building behind it and hurling the sleeping occupants to their deaths in the river.

Londoners still thrive on anything unusual. You have only to dig a hole in the road to attract a crowd almost worthy of a motion-picture star, and if by chance you walk under a bus you become instantly, though momentarily, a source of

public entertainment. The citizens of seventeenth-century London were equally enthusiastic spectators, and their river could invariably be relied on to provide some sort of diversion. There was always someone who would oblige by pushing a drunk off the Bridge, or by falling out of a wherry into the water. Nature helped out by sending occasional porpoises to entertain with their antics, and as a special treat she would oblige with a fully grown whale. It is true that no whale ever equalled the sensation caused by the creature that shot the Bridge in the year 1240 and was chased up river to Mortlake before finally being killed. Nevertheless two whales appeared in the Thames in the seventeenth century, and both managed to create minor sensations. The first appeared in 1658 and measured fifty-eight feet in length, large enough to do considerable damage to shipping in the Pool had it not run aground at Greenwich. The locals immediately took a mean advantage, attacking it with spears, knives and bill-hooks until the unfortunate creature eventually expired. Once beached, it became a major holiday attraction, drawing spectators from all spheres "by water, horse, coach and on foot". The second whale was driven into the Thames estuary during a violent storm, but Evelyn, who gave an account of the first visitor, merely records that this was two feet shorter. The fact that the creature was measured suggests that it met the same fate as its predecessor. We have only to remember the queues that formed to see a whale pickled in formalin, which was exhibited in London in 1954, to realize that the citizens would still turn out in force if a live whale should be sufficiently unwise to show itself in the Thames again.

Tales of the river are as numerous as the treasures that have been found in it, but one of the most entertaining and even significant events is rarely remembered. If we had been at Deptford on a fine July day in 1661, we should have seen a little knot of elegantly attired men peering anxiously into the filthy water of the dock. Now and then one of them would

issue terse instructions to a squad of workmen operating a winch. From it a taut hawser ran away into the inky blackness of the river. Any spectator possessing the temerity of a modern pressman would have discovered that the group included Mr. John Evelyn and fellow members of what Charles II was soon to dub the *Royal Society*. He would know, too, that on the end of the cable hung a monstrous sphere of cast lead in which sat the Society's intrepid curator. These men were taking an initial hesitant step towards conquering a new world by testing for the first time their newly invented diving-bell. While this was the first of its type, it was not the first bell ever invented. Tradition would have us believe that the first was produced by Roger Bacon in 1250. However, the distinction may belong to a pair of Greeks who demonstrated a kettle-shaped contraption before the Emperor Charles V at Toledo in 1588. But the first serious descent into the sea was sponsored by our own Charles II, probably as a result of the Deptford experiments. This was in 1683, when one William Phipps tried to salvage the treasures that lay in the hold of a sunken Spanish galleon. Although the first attempt failed, he tried again in 1687 and this time he is said to have recovered bullion to the value of two hundred thousand pounds—and a knighthood to boot.

Even his enemies admitted that Charles II had a vivid and colourful personality, and it would have been a sad omission if the river failed to yield relics with which he was closely associated. After all, it was the Merry Monarch who could claim to have made more use of the river than any other sovereign. His procession bringing Catherine of Braganza to Whitehall was the greatest show the Thames had ever seen. On one occasion he raced in his new yacht against the Duke of York over a course from Greenwich to Gravesend, and lost; and in the course of his reign he made innumerable official and some strictly unofficial excursions along the river. Many of his coins have been found, but although they

carry his portrait they can hardly be claimed as personal links with the king. A few Thames relics, however, bear the king's portrait not by tradition but because his subjects desired it. Notable among these are a small number of sleeve-links decorated with the royal profile. A single button found by the writer bears the king's head and the letters C.R. It has been suggested that these loyal tokens were worn by Royalists so that they could make themselves known to each other during the dark days of the Commonwealth. It is an attractive theory, but one that has no evidence to support it. Similar buttons and links were made during the reign of Queen Anne, when there could have been no call for secret signs. A more likely answer may be that the Charles II buttons were produced after the Restoration, possibly at the time of his coronation, and were sold as souvenirs. In the same class belong a button and a sleeve-link, both adorned with a crown and two hearts which may commemorate the marriage of Charles and Catherine. It is particularly fitting that these should be found in the river which provided the Queen with one of her few really happy moments.

Catherine arrived at Portsmouth in May 1662, and from there was driven to Hampton Court, where she remained until the end of August. Although her eventual coming to London attracted great crowds, and the river, according to Pepys, was so filled with boats that he could not see the water, the royal marriage was not generally popular. So perhaps the commemorative buttons and links are not relics of as happy an event as they might seem. They are certainly not the only lovers' mementoes to have ended their days in the river. Modern and Victorian wedding rings are among the more common finds, and every now and then one encounters a pathetic posy ring of the seventeenth century. Many of these were no more than friendly gestures, but a few may have been exchanged as betrothal rings among the poorer classes. One brass ring from the Thames is engraved

with the words "I love erve" and another "Love thy trv frind". If we wish to be cynical, it is easy to sneer at their triteness, as did Gratiano in the *Merchant of Venice* when he described the posy on Nerissa's ring as:

"For all the world like cutlers' poetry
Upon a knife, 'Love me, and leave me not.'"

But it would be more charitable to remember that he had vowed to wear the ring even into the grave. Surely these pathetic rings from the Thames must have meant as much to someone? It would be hard to believe that they were thrown away without causing a heartache somewhere. Is it too melodramatic to imagine a girl running through the city streets to Blackfriars' Stairs with her world seemingly shattered beyond repair? Believing that life holds nothing more, she drowns herself, while the true friend who was not true enough does no more than merely throw her ring into the water. Pure fiction, of course, yet with the ring beside me as I write, I cannot but wonder whether it would have been kinder to have left it where it lay.

The Narrowing Field

THE City of London stepped out into the eighteenth century with a clean face: new houses, wharves, warehouses, public buildings, and a new sky-line created by the spires of Sir Christopher Wren's magnificent churches that clustered round his still unfinished masterpiece, St. Paul's Cathedral. But regrettably the property boundaries remained much as they had been before the Great Fire, with the result that many of the streets and alleys were no wider than those of the Middle Ages. The river frontage had more uniformity than before, and was embellished with a few imposing new buildings like Wren's Custom House, but it still left much to be desired. Thames Street had been raised to prevent high tides from swamping it, but the alleys that ran down to the water's edge were less picturesque than their names suggested.

The City was no longer graced by the homes of the aristocracy, for they had abandoned the smoke and grime for the green fields to the west and north. Away to the east, from Wapping to Limehouse, wealthy mariners were building houses to which they could retire yet still see the tall masts and catch the smell of tar and hemp. There also lived the mariners who were not so lucky—those who waited for the next ship that might or might not set them on the road to making their fortunes. Service for men in the navy was then a chancy business, a constant risk of life at the hands of unskilled commanders and no certainty of being paid at the

voyage's end. But there were merchant ships sailing on every tide, bound for the ends of the earth; and many a lad could hope to follow in the steps of Sir Cloudesley Shovell and rise from cabin-boy to admiral.

All along the river from Wapping to Greenwich the shipyards were turning out the vessels that would recapture the maritime prestige that had suffered so much at the hands of the Dutch in the seventeenth century. At Deptford were laid down the ships of the East India Company, which sailed a regular service to Bombay and Calcutta, carrying all the wonders that English tradesmen could devise. A single cargo might contain everything from anchors, millstones and lead, to hats, buttons, pins, glasses, scissors, "hubble-bubble" pipes and bottled-beer. All these commodities would have been brought down from the City wharves aboard lighters which fed the hungry holds of the great ships as they rode at anchor off Ratcliffe or Greenwich. Smaller vessels moored in the City itself, at Billingsgate Dock, before setting sail for America, Africa or even China. Relics of this worldwide trade lie in the river mud, along with the memories of long-forgotten ships.

The import trade was naturally as important as the export, and so it is that pins intended for sale in far away tropical ports lie beside fragments of porcelain from China. Here and there are the coins of Sweden, France, Spain, Portugal and the German states. A lead seal with an Arabic inscription lies beside the bowl of a spoon stamped with a continental pewterer's mark. Near by, the broken stoneware pottery of Westerwald or Grentzhausen lies on top of glass from Venice or clay pipes blackened by the smoke of Virginian tobacco. Every now and then one finds a cowry shell of the kind used as currency among primitive peoples of the Indian Ocean. We shall never know whether they were brought to England to be made into bracelets or necklaces, or whether these represent money used in trade with Africa, India or Ceylon.

Stranger still was a find made while rebuilding at Butler's Wharf, on the south shore near Tower Bridge. There, amid refuse of the eighteenth century, was discovered a bone harpoon which might at first glance have been mistaken for a Mesolithic weapon, but which turned out to be part of an Eskimo fishing-spear and so was presumably contemporary with the eighteenth-century pottery around it. Perhaps it was brought home as a souvenir by a sailor returning from a northern voyage, and being neither useful nor beautiful his wife threw it out—as wives still do today!

Although many a good ship came home to the Thames to die, it is too much to expect that their bones should still lie buried in the river mud. It is true that in earlier times such things did happen. The charred timbers of the *Great Harry* lay in the river at Woolwich; and regardless of Elizabeth I's wish that it should be preserved for all time, the *Golden Hind* had been allowed to rot in the mud at Deptford. This heart-breaking end to the story of one of the world's greatest ships was made the more pathetic by the fact that it was on her deck, there at Deptford, that Drake had been knighted on returning from his voyage round the world. The skeleton was eventually broken up, and a chair made from the few sound timbers was presented to the Bodleian Library at Oxford in 1668 by one John Davies, a storekeeper at the Deptford dockyard. Pepys recalled the discovery of another forgotten ship that lay in the Deptford mud. He wrote in his diary:

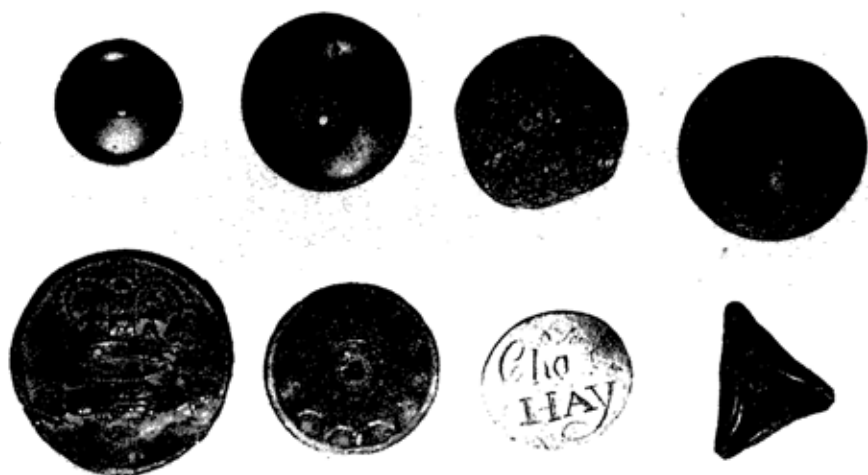
“... discoursed about cleaning of the wet docke, and heard (which I had before) how, when the docke was made, a ship of near 500 tons was there found; a ship supposed of Queen Elizabeth's time, and well wrought, with a great deal of stone shot in her of eighteen inches diameter, which was shot then in use . . .”

Farther down-stream at Woolwich a number of old ships had been deliberately scuttled during the scare of 1667, when the



XXXIX. Genuine and counterfeit halfpennies of George III. Both from Winchester Wharf, Southwark. *Photo: John Vickers.*

XL. Brass and pewter buttons. From Queenhithe. 1 and 2, Sixteenth century; 3-5, Seventeenth century; 6-8, Eighteenth century. No. 5 shows an early and rare uniform button of the Hand-in-Hand Fire Insurance Company. No. 8, a naval button folded to form a model tricorn hat. (Numbering from top left).



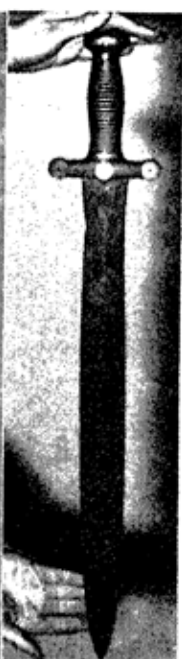


XLI. Iron cannon. From Butler's Wharf, Bermondsey. Nineteenth century.

XLII. Examples of "Billie and Charlie" faked antiquities. Nineteenth century. *Guildhall Mus.*



XLIII. Sword with brass hilt c. 1855. Found near the Black-wall Tunnel.



Dutch attacked Chatham and their fleet appeared at the mouth of the Thames. But these must almost certainly have been removed as soon as they became dangers only to our own shipping.

While dredging in 1927 below London Bridge near the Custom House, a large muzzle-loading cannon was recovered; and again in 1930 another came to light in the same area. The second gun had suffered through having lost part of its muzzle and so had been used as a sinker for a marker-buoy, for the shackle and iron chain were still attached. More recently, in 1952, another cannon was found in the river off Butler's Wharf (Pl. XLI), and this too had suffered the indignity of ending its days as a weight for a buoy. The photograph was taken soon after its discovery as it lay on the deck of the dredger. One can clearly see that the weapon was in a fine state of preservation, as also was the shackle that bound it. But unfortunately the gun was of no great age, having seen service as recently as the second half of the nineteenth century. An old man who had worked on the wharf all his life believed that it came from a ship named the *Mayflower* that had been broken up alongside the wharf in the late nineteenth century and her timbers used in the building of revetments. Perhaps in corroboration of his story, the dredger later pulled up a number of heavy oak timbers that had been driven into the river-bed along the line of the wharf. Efforts were made to save the gun, but the Port of London Authority was unable to give it a home, the Tower had too many examples to want another, and neither the London nor Guildhall museums could find room for it. Finally, when the dredging contractors could keep it no longer, the gun was sold for scrap, a sad end for an interesting relic.

Somewhere beneath the tropical waters of the Caribbean the coral-coated hulls of Deptford ships must still lie intact. Nearer at home the Goodwin Sands, the dreaded *shippe*

swallower, holds scores of tall ships within its bosom. But the evil-smelling mud of the Thames is now unlikely to retain any such treasures. A few unidentifiable timbers may be scattered here and there, relics perhaps of the great storm of November 1703, when every ship on the river was thrown on to the shore, and more than four hundred barges and wherries sank or were beaten to matchwood against the quays. But even if a few planks of wood are brought up by the dredgers, no one is able to identify them; and not even the most imaginative museum curator could turn them into a worthwhile museum exhibit.

To have lived in London in the early eighteenth century, and to have seen the masts of great ships sprouting like bristles on a broom above the housetops, must have gladdened the hearts of every citizen. These were the proof of Britain's ever-growing maritime prosperity, born and bred on the Thames. When Defoe published his *Tour of England and Wales* (1724-26) he wrote:

"That part of the river of Thames which is properly the harbour, and where the ships usually deliver or unload their cargoes, is called the Pool, and begins at the turning of Limehouse Reach, and extends to the Custom-house-keys: In this compass I have had the curiosity to count the ships as well as I could, *en passant*, and have found above two thousand sail of all sorts, not reckoning barges, lighters or pleasure boats, and yachts; but vessels that really go to sea."

The ships are gone, but traces of the men who sailed in them are still numbered among the river's treasures. Most personal and easily recognizable are the naval buttons of the late eighteenth century, with their characteristic anchor decoration or with the earlier rose pattern. The most interesting yet found is a brass button which, having lost its shank, had been turned up at the edges to make a miniature

cocked hat (Pl. XL, 8). Is this a relic of some long voyage and of a sailor who had nothing else to do to pass away his off-duty hours?

While buttons are the smallest relics of the sea, there are other larger finds which belonged to the men of the river, if not to the deep-sea sailors. When the tide falls abnormally low, rusted anchors can be seen protruding from the mud, but their weight and the depth to which they are buried ensure that no mudlark could carry them off, even if he were fool enough to want to do so. More portable, but generally in so poor a condition as to make them useless, are numerous boat-hooks, many of which must be relics of eighteenth-century Thames watermen. Generally speaking, all iron relics that have spent years on the surface of the foreshore between high and low water marks are so badly corroded that they are not worth keeping. This fact often has curious results, for when an iron object lies only partially buried the exposed section may be nearly eaten away by rust, while the part that lies sealed in the silt is in almost perfect condition.

Every once in a while an object that has been totally sealed in the mud is exposed for the first time, and it is then possible to recover well-preserved iron relics. One such find was a shipwright's double-bladed adze that turned up at Dowgate in 1954. In the previous year the writer uncovered an iron-bladed axe of the seventeenth century which not only possessed an intact blade but also retained its wooden handle (Pl. XXX). Unfortunately the constant pounding of lighters on the shore over it had broken the shaft into a number of pieces, but this was repaired without great difficulty. The problem that arises whenever waterlogged timber is found is to prevent it from drying naturally, for in nine cases out of ten the wood will shrink rapidly to a fraction of its former size, at the same time splitting and warping until its original shape is almost unrecognizable. The solution is to draw the water out, and at the same time to replace it by a stabilizing substance

before the cells of the wood collapse. It is a problem on which archaeological chemists are still working. Years ago it was thought sufficient to allow the wood to dry very slowly, and it was therefore encased in quantities of damp moss or newspaper. But this method was never reliable. Then it was suggested that oil should replace the water, and although this did work after a fashion the wood always remained discoloured and oily to the touch. The treatment given to the axe is one of the most successful yet produced, but even this has its limitations and is not entirely fool-proof. The wood is placed in a bath containing a super-saturated solution of alum, which crystallizes at a fairly high temperature, and is left there until the water inside it has been replaced by the liquid alum. When the wood is taken out of the hot bath the alum sets and prevents the cells from collapsing. The pieces of the axe-handle were strung together on a wire rod while they still remained soft, and were later joined by the use of glue and plastic wood. In this way the axe, which had lain on the foreshore for more than two hundred and fifty years, has been restored, in appearance at least, to its original condition. It is supremely satisfying when these onerous preservation jobs succeed, but, oh, so mortifying when they fail. I still recall with horror a large ornamental wooden button which before treatment was about the size of a penny, but finished up the shape and size of a small lozenge!

It should by now be apparent that buttons are among the most common yet most interesting of the river's later treasures; their interest lying in the fact that so many of them have a story to tell. Those of the sixteenth and seventeenth centuries, although often elaborately decorated, are not as helpful as those of the eighteenth. These later buttons often bear the maker's name, which sometimes can be traced in contemporary directories. Some are ornamented with the arms of City Companies, having been worn on their livery, while others belonged to the uniforms of the fire insurance

companies (Pl. XL, 5). It was after the Great Fire that the fire insurance companies came into being, every company having its own equipment and firemen. The houses that were insured with each firm were given a lead, or later a tin or cast-iron, plaque bearing the sign of the company concerned. There was no question of the brigades helping each other. If a burning house bore the sign of the Phoenix and the Sun firemen happened to be passing, they would normally leave it for the Phoenix men to look after, even if that brigade were nowhere in sight. It must have been very irritating for the wretched person whose home happened to be on fire. It was not until 1858 that a pooling of resources was made possible by the formation of a Fire Offices Committee, and not until 1865 were the appliances finally taken over to form the nucleus of our modern Fire Brigade.

The oldest fire insurance company was the *Hand-in-Hand*, which was founded in 1696; and this was followed in 1710 by the *Sun*, in 1714 by the *Union*, by the *Westminster* in 1717 and by the *London Assurance* and the *Royal Exchange* in 1720. Many others followed in their wake, but these six were the pioneers of what has ever since been a very profitable business.

A few of the river's buttons seem to go out of their way to be deliberately tantalizing, giving us a hint of a story and no more. One of these (Pl. XL, 7) is a simple coat button of the late eighteenth century, roughly engraved with the surname "Hay" and above it an unfinished Christian name, "Cha l", which must surely have been Charles. Who was this Charles Hay, and why was his name engraved on the button? Did he do it himself in an idle moment, or did he employ an engraver to prepare a set of buttons for which this was a trial-piece? They are questions that will never be answered. No doubt Mr. Hay lived a full and worthy life, well liked and respected by all around him. If this were so, then it is slightly ironical that he should be remembered today by nothing but a button.

Finally, though certainly not least in their kind, come the buttons that were lost from military uniforms. Among them are those of the 83rd Foot (now the 1st Battalion, Royal Ulster Rifles), the Royal Veteran Companies, the Coldstream Guards, and the 3rd Guards (now Scots Guards), all dating between about 1780 and 1820. One of the most intriguing is a small button from a tunic of the Pembroke Militia of a type worn *circa* 1780. The Militia was in London at the time of the Gordon Riots of June 1780, when the



28. Model soldier cast in tin and lead alloy. Made in Germany, 1760-80. From Queenhithe. ($\frac{2}{3}$)

London mob burnt no less than seventy houses and four gaols before being dispersed by troops. The official report showed that two hundred and eighty-five people died from musket fire and a hundred and seventy-three were wounded. But it is believed that the casualties in fact numbered more than seven hundred. It is quite possible that the river's Pembroke Militia button is a relic of this terrible affray.

Soldiers have always been dear to the hearts of children, and so it is not surprising that the river should remember them not only by trappings from their uniforms but also by children's models. Tin soldiers were first produced in Germany at Augsburg, Nuremburg and other cities during the eighteenth century, and one of these products has found its way into the Thames. Made in a simple two-piece mould, this model is a masterpiece in its detail of both the horseman and his mount (Fig. 28). We can see the buttons, facings and the lace of his cuffs, the decoration of his saddle-cloth and holster, and even the hair on the hide of the horse. This proud officer was made between about 1760 and 1780. But even now,

nearly two hundred years later, he is still ready to lead an army to victory over the dining-room table. Many of the more recent toy soldiers have come back from their graves on the shore of the Thames, and among them are the men who fought their battles in the uniforms of the Boer War and of the First World War.

Toy guns turn up from time to time, but most of them are comparatively new and their advanced state of corrosion reminds us that modern toys are not made to last. But a boy's dress sword of the eighteenth century which turned up at Queenhithe is no paltry plaything. Although blunt-edged and with a rounded tip, this weapon is of fine, springy steel and could inflict an unpleasant injury if its owner decided to fight a duel over a cream bun.

As the result of a broadcast, I received a letter from a man who had been working on the river foreshore close to the Blackwall Tunnel and had found a sword buried deep in the mud. He enclosed a drawing of the weapon, which looked uncannily like a Roman legionary *gladius*. At once thoughts turned to the possibility of his having found another rare weapon of the type that Thomas Layton had given to the British Museum. Although the new find had no scabbard the drawing showed that it was otherwise perfect. It would score over the Layton sword in that respect, for his had lost its hilt. But, alas, these hopes were quickly dashed. The Blackwall sword turned out to be no more than a hundred years old. It certainly looked very like a *gladius*, having a ribbed hilt of brass and a short, double-edged blade, but there the resemblance ended. It was a unique type of sword issued to non-commissioned officers of the Land Transport Corps, a force raised in 1855 for service in the Crimea and disbanded two years later. The Corps was apparently an undistinguished ancestor of our Royal Army Service Corps, and was made up largely of undesirable elements from the Indian Army. The sword is one of the most unwieldy

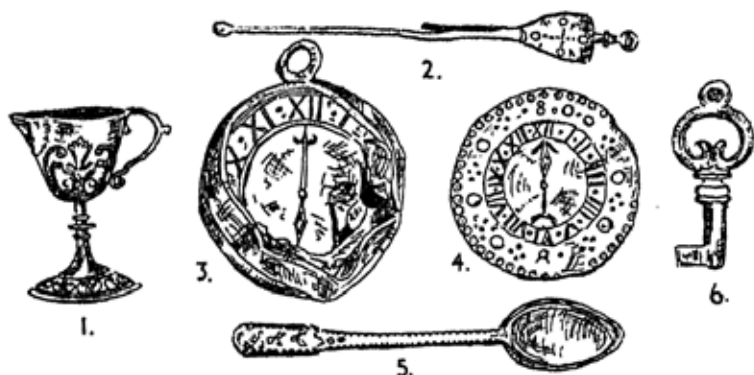
weapons ever issued to the British Army, and to have worn it must have been more of a punishment than a sign of rank. No doubt its owner was heartily glad to be rid of it. (Pl. XLIII)

More interesting, though less impressive to look at, is a socketed bayonet of the late eighteenth or early nineteenth century which was found protruding from the mud near Southwark Bridge. There is nothing particularly unusual about the weapon itself. Indeed, it is a type that can be bought from most antique dealers who sell them at two or three shillings a time for use as pokers. The tubular socket was intended to fit over the muzzle of the musket, but in the Thames example a piece of wood protruded from the socket, which showed that this bayonet had ended its life mounted on the end of a pole. Here, then, was another question-mark. There can be no doubt that the weapon had been put to some unofficial purpose, but whether it had merely been turned into a spike for a wooden clothes prop or had been adapted for service as a spear or pike we shall never know. On the whole the latter suggestion is the more probable, and it is quite possible that it was one of the weapons used by the mob in the Gordon riots.

So many relics of the seventeenth and eighteenth centuries have been found in the river that it becomes increasingly difficult to be selective. To people who find the past entertaining and see romance where it probably never existed, each and every object is a jewel in the river's muddy diadem. A small selection must suffice to give some idea of the wide range of these later finds.

Returning first to the relics of childhood, a pewter model of a watch is worth remembering (Fig. 29, 3). Cast in a mould similar to that used in making late seventeenth- to eighteenth-century buttons, this watch is datable to the early eighteenth century on the evidence of its face, which is copied from a type in common use at that time. The mould-pressed hands stand immovably at six o'clock. It is a rare find, for few such toys

have survived. But that is not its only claim to fame. This watch was found on the bottom step of the flight that leads down beside the modern London Bridge on the Southwark shore. As far as one can tell, no other relics have been found there since the foreshore was made up with hardcore to take the weight of the ocean-going ships that lie along the wharves. For this reason the spot is rarely visited by antiquarian mudlarks, although occasionally scoured by collectors of scrap metal who rout about beside the keels and



29. Metal toys: 1, Pewter chalice, nineteenth century; 2, Pewter fire-tongs, late eighteenth century; 3-4, Pewter watch and watch-face, c. 1700; 5, Pewter spoon, c. 1800; 6, Iron key, seventeenth to eighteenth century. 1, 2, 4-6 from Queenhithe foreshore. (3)

knife-edged bows of cargo vessels. It was one such collector who found the battered pewter watch. By some strange chance the tide had scooped it from farther out in the river-bed and had thrown it on to the steps. Had it not been picked up, the next ebb tide would probably have carried it off into deep water, never to be seen again.

The same scrap-metal collector, when walking on the Southwark shore near Blackfriars' Bridge, came upon two more treasures that so far as I know have not been found in

the Thames before. At some time towards the end of the eighteenth century a doctor stepped from his wherry on to the jetty, and in doing so dropped his bag of instruments into the water. When the tide fell he sent a boy to search for them, but the bag had opened and some of the contents had been lost into the mud. This may or may not be a true happening, but it would account for the discovery of two pewter urethral syringes that were found together on the shore (Fig. 30). One is complete though flattened, while the other has lost



30. Pewter urethral syringes. From Blackfriars Bridge, c.1800. (2)

its nozzle, but they can still claim to be two of the most improbable objects ever to have found their way into the river.

Second only in numbers to the potsherds that litter the shores are the quantities of broken clay tobacco-pipes (Pl. XXXV). At any point where the banks have supported seventeenth- and eighteenth-century habitation, and where modern hard-core does not seal the shore, we may expect to find a wide range of pipe bowls and innumerable fragmentary stems that protrude from the silt like candles on a cake. The bowls are worth collecting, for they provide an interesting source of study, and one can expect, in time, to make up a fairly complete series ranging from the small acorn-cup sizes of the late Elizabethan era to the elaborately decorated bowls of the nineteenth century. Much more rare are other relics of smokers' equipment. Ornamented pipe-stoppers have occasionally been found, and so too have silver or plated match-boxes. A nineteenth-century example of the latter opened at either end, one lid revealing matches, the other an

indecent model. Even Victorians had a coarse sense of humour. A number of copper and brass tobacco-box lids of the seventeenth and eighteenth centuries have been found, but none are as well preserved as the Dutch box illustrated in Plate XXXVI.

After tramping the shore until the incoming tide threatened to drive me from the mud, I had finished up with nothing but an aching back and a feeling inside that told me it was nearing lunch time. It had been a cold morning with heavy thunder clouds giving a dull and flat lighting that makes mudlarking an eye-straining occupation. But just as I was leaving, the sun peered round the edge of a cloud and lit up the shore for the first time. The damp stones sparkled and the rust-smearred paint on the barges glowed, but brightest of all shone the corner of a brass object protruding from the black silt. It was, of course, the Dutch tobacco box, a find that made a dozen fruitless visits eminently worthwhile. On the lid is engraved the figure of an old man carrying a boat on his shoulder and on the edge of the picture is written the word *Samsom*. On the bottom of the box is another design that might represent anything from the roof and spires of a cathedral to the masts of shipping rising above the roofs of a town. These Dutch tobacco-boxes were imported into England in considerable numbers, and they are to be seen in most museum collections. The Layton Collection possesses two or three, but there is no indication that they come from the Thames.

Lastly among the selected small finds of the seventeenth and eighteenth centuries I have chosen a group of coins, not because coins are rare but because these particular examples have a story to tell. They began to turn up, one by one, in 1949, and no doubt other people recovered more of them from a small patch of black silt on the Queenhithe-Southwark Bridge shore. It was there and nowhere else that these coins were found. At first it seemed to be no more than a

coincidence that one coin was invariably to be found on this patch each time it was visited. It was as though the river took a single coin from its store and said to itself "Let's see if this one will be noticed". One day the coin would be lying face up as if asking to be found, but on another it would lurk on edge in the shadow of a brick with a "catch me if you can" air about it. In all I found thirty-two coins in this spot over a period of about eighteen months, but it was not until a dozen or more had been found that it occurred to me that there might be an association between them. There is now little doubt that they formed the contents of a box, or more probably a purse. From a monetary point of view the hoard was of little value, for the coins that I found amounted to twenty-nine farthings, two halfpennies and one sixpence, a grand total of one and twopence farthing. But among the coins were examples of the comparatively rare tin or pewter money of the late seventeenth century, there being three farthings of Charles II, five of James II and five farthings and two halfpennies of William and Mary. All the rest were of copper, save for the silver sixpence which was dated 1696, the latest date in the hoard. We therefore know that the purse was not lost or hidden before that date, and in view of the condition of some of the later coins it seems probable that they were still in circulation until 1700 or even a little later.

The question remains as always: how did the coins come to be at the spot where they were found? There are two possible answers; one mundane, the other more exciting. The first is simply that the owner dropped his purse into the river at high water and never bothered to retrieve it. But the silt in this area is liberally scattered with seventeenth-century building débris which would have prevented the purse from sinking into the mud. If the owner did not think it worth recovering, there were plenty of people who did and who would have carried it off as soon as the tide fell. But the fact remains that the money was buried and that no one ever

retrieved it. The second theory takes these points into account.

It is possible that a thief stole the purse, either in the street or from a riverside tavern. He was discovered and pursued, but the tide being low he made his escape along the foreshore. But fearing that he might be caught, he buried the purse on the shore and marked the spot with a stone or some other object that he would recognize. Having done this he might have been caught and killed by his pursuers, or more probably may have returned the next day to find that the tide had moved the marker stone.

Unfortunately, the end of the story remains as full of question marks as the beginning. The ground has been searched time and time again, the whole coin-bearing area having been dug to a depth of six inches and all the mud washed and sieved, but no traces of a purse have been found. It is quite possible that if the bag were made from woven fabric it would have vanished without trace, but even then one would expect to find a cache of coins that provided the source for the single examples that so regularly appeared on the surface. The only find to be made during the systematic search proved to be a lead medallion commemorating the accession of George II and Queen Caroline—an interesting relic in its own right, but not very helpful under the circumstances.

As the eighteenth century progressed, so the City's port continued to grow, and London itself stretched ever farther up and down the banks of the river. But the greatest change that came to the Thames during that century was undoubtedly the building of new bridges, a step vigorously opposed by all who had a vested interest in keeping Old London Bridge as the City's only dry route across the river. Many suggestions had been put forward in the sixteenth and seventeenth centuries for the building of new bridges, but all had been shelved almost as soon as they were mooted. In 1734 a new plan was prepared for a bridge to be built at West-

minster and, regardless of the curses and protests of the watermen, the Borough of Southwark and of London Bridge merchants, an Act of Parliament was passed in 1736. By 1750 the bridge was completed. Ten years later work started on Blackfriars' Bridge, and by 1820 both Southwark and Vauxhall Bridges were open, each completed arch being another nail in the watermen's coffin. The first Putney Bridge had been built as early as 1729, but was too far up-stream to interfere with London interests. Other bridges were erected during the nineteenth century, yet almost until the end of it London Bridge remained the most easterly, leaving the watermen to ply their trade at Wapping, Ratcliffe, Deptford, Woolwich and so on. Thomas Rowlandson's famous drawing of watermen at Wapping Old Stairs (1811) is ample evidence that they still found plenty of business, although their wherries look far from trustworthy.

We have seen in each chapter how London Bridge played its part in supplying the river with its treasures. Today the new bridges are taking their turn in supplying relics for the mudlarks and dredgers of future generations. Criminals dispose of unlicensed firearms and stolen office safes, deserted wives throw away their wedding rings and young lovers drop coins into the water for luck. Life has not changed a great deal through the centuries, and all these things can be paralleled by finds from past ages. But every now and then the river receives something which is unique, something that will excite and mystify the archaeologists of a thousand years hence. While standing on the Southwark shore one day as the tide began to ebb I noticed a black circular object in the water towards mid-stream. At first it seemed to be a man's head, or perhaps a football, but then I saw that the *thing* was stationary and that the full force of the tide was swirling round it. By this time two or three people had spotted it from the Bankside; but the light was too poor to make much of it, and they seemed to think it was some strange monster.

However, as the tide fell the monster revealed itself as a London Passenger Transport portable bus-stop. An inebriated reveller must have thrown it off Southwark Bridge during the night.

It is a far cry from the flints of Palaeolithic man to a portable bus-stop, but the Thames is nothing if not liberal in its collective instincts. It is this unpredictability that makes the search for river relics so interesting. An incendiary bomb of the Luftwaffe lies beside a burnt window-pane from the fire of 1666, a stone axe shares its bed with a rusting bicycle wheel, while an Elizabethan money-box nestles in an eighteenth-century boot. What could be more varied?

There are, we know, many people who cannot imagine why anyone should be foolish enough to spend his allotted span trying to recapture yesterday instead of preparing for tomorrow. When one pauses to think about it, it does seem slightly odd that people should enjoy, and even be paid for, seeking the refuse of our predecessors for the purpose of displaying it in glass cases. It is even more odd that hundreds of thousands of people should queue to look at it. Materialists do not care what we owe to the past, others merely forget. But if we are comparatively satisfied with the present, then it is only right and proper that we should honour and cherish the stepping-stones that have led us here. It is equally proper that Londoners should take pride in the history of the Thames, for without it they would not be where they are today. We have only to imagine what would happen to London's prosperity if the Thames dried up tomorrow to appreciate how much we owe to the river.

But even if you have never been to London, even if you *have* been there and loathe it and never want to go again, you are still in the river's debt. If London had not stood on the bank of the Thames, George I would not have planned his grand river picnic of 1717, and without that Handel would never have been called upon to compose the Water Music !

Mistakes, Forgeries and Tall Stories

PRECEDING chapters may have given the impression that the Thames is an oyster whose pearls are waiting to be gathered by anyone who cares to set foot on the foreshores. That would be misleading, for even the most experienced river antiquary suffers many more disappointments than moments of elation.

We have seen, time and time again, that the water is capable of maintaining metal objects in an amazing state of preservation. In some instances ironwork has been recovered in such fine condition that it requires only washing to make it shine like silver. Bronze and brass can flash like gold without any rubbing at all. But bitter experience teaches us that all that glitters is not old, and conversely that the most corroded and decayed finds may not be of any great age either.

Many quite modern objects have been found in the river and classified as relics of considerable antiquity. Late nineteenth-century boat-hooks, which are as yet of no possible archaeological interest, achieve a quite undeserved fame when extracted from a thick casing of rust. Modern horse-shoes may be mistaken for mediaeval, or even Roman antiquities simply because rust has changed their outline. As a general rule, rapid decay in ironwork is to be expected where objects have been thrown out on stretches of *made-up* shore, which prevents them sinking and being sealed in mud. They are therefore open to attack by water and air with the ebb and flow of every tide.

The incorrect identification of "antiquities" is not only confined to objects of iron. It happens with all manner of things, largely because the finder has a preconceived idea that if his discoveries are not blatantly modern, then they must automatically be old. It would be a very good lesson for many modern archaeologists to be taken to a scrap heap in the course of their studies, for there they would learn that fragments of familiar things look very puzzling when decayed and taken from their normal settings. An experienced antiquary searching the shore once found part of a typewriter and identified it as a late mediaeval purse-frame. He would still be labelling it as such to this day, if he had not been shown the rusted machine from which it came.

A small toy figure in lead was identified by a well-known museum as being a model of a member of a religious order of the sixteenth century. Had the figure retained its original paint the experts would have seen that it represented a Red Cross nurse of the First World War. A mudlark claimed to have found part of a Roman mosaic floor on the shore near Southwark Bridge. In support of his claim he was able to produce fragments of black and white marble mosaic which were at first accepted as Roman. A later inspection showed that the small cubes of marble were in fact bedded in modern mortar and must have formed part of an ornamental floor of the type so familiar in the entrances to late Victorian shops.

These objects were all, in their own way, perfectly straightforward and were never, of course, intended to deceive. But there are some Thames relics which were made for that very purpose. A surprisingly large percentage of the coins found in the river were made without official sanction. Even among the Roman coinage we can expect to find numerous imitations, but the largest numbers date from the nineteenth century, when approximately fifty per cent are forgeries. The most popular denomination for coiners during the reign of

George IV seems to have been the shilling; and the reign of Victoria provides more half-crowns than any other coin. In our own century, the reigns of Edward VII and George V appear to have bred forgers who specialized in the florin. No doubt official records would show a different balance; nevertheless these variations are very striking among coins from the Thames.

As the value of money has dropped, so coiners have been forced to produce the higher values, but in the eighteenth century it was still worth their while to mint halfpennies. The profit that they made on each coin was infinitesimal, for it was derived only from the fraction of a halfpennyworth of copper that was saved by making the forgery slightly underweight. Many coiners were content to make more or less exact copies of the official dies, trusting to luck that they would not be caught. If they should be apprehended, and many were, their fate was certain and far from pleasant.

The Treason Act passed in the middle of the fourteenth century classified as high treason the "counterfeiting of the King's coin and importing counterfeits thereof", and this law with its accompanying penalties stood until 1832. It was decreed that any man convicted of treason should be lashed to a hurdle and hauled to the place of execution, where he would be publicly hanged. But before death released him, he should be cut down, disembowelled, and carved into quarters, the pieces being displayed at public places as a deterrent to others. Women paid the penalty for treason in a different manner: after being drawn to the appointed place on a hurdle they died at the stake. It was not until 1790 that burning was officially abandoned in favour of hanging, and not until 1814 that men were spared the agony of drawing and quartering. But it was still quite a price to pay for making a counterfeit halfpenny.

An interesting example of the way in which coiners tried to avoid the penalty for high treason has been provided by

the discovery of two halfpennies at Winchester Wharf in Southwark (Pl. XXXIX). The reverses are identical with those of the genuine coinage, and so too are the obverse heads of George III. But in each case the legend has been changed from GEORGIUS III REX to read BRVTVS SEXTVS. By doing this, the forger could claim that he had not forged the king's coin, as the official currency always bears his name. Pleading on these lines, the coiner could expect to escape with a light sentence that generally amounted to no more than being burnt in the hand.

The river has yielded other examples of irregular practices relating to the coinage, although the coins themselves are perfectly genuine. In the days when silver and gold coins were minted by hammering, the edges of each disc would tend to be slightly uneven and spread out beyond the design. Citizens with an eye to the main chance found it profitable to trim the edges of each coin that passed through their hands; thus by clipping a certain number of silver pennies they would eventually obtain an extra penny-weight of silver. It seems hardly worth the effort, but nevertheless it was a common practice until the milling process was introduced in the late seventeenth century.

Arraignment of felons accused of clipping was still quite common at the end of the seventeenth century, and numerous trials are recorded in the *Old Bailey Sessions Papers*, 1684-87. Among them are charges of clipping half-crowns and shillings of Charles I, shillings of Elizabeth and a half-crown of Edward VI, an interesting example of the range of coins in use at that time. In the same *Papers* are references to the coining of Charles II half-crowns and both tin halfpennies and farthings of the type mentioned in the previous chapter. Pathetically human among the accounts of the trials is the brief story of Anabella Reeves who was found guilty of "... coining twenty false monnies ...". Having been caught in the act the poor woman had no

defence and could only try to save herself by pleading pregnancy. This was quickly disproved and she died the appalling death that the law demanded.

The presence of counterfeit and clipped coins in the Thames can, presumably, be accounted for by the honesty of Londoners who noticed them and threw them into the water, regardless of the financial loss to themselves, rather than pass false money to someone else. Thus these coins provide an unwitting memorial to both the honesty and dishonesty of the citizens of London.

Dishonesty does occasionally have its amusing side, and few stories of the river could expect to equal the extraordinary exploits of William Smith and Charles Eaton, now known to the world as Billie and Charlie, two of London's most audacious crooks. Their history began in 1857 during the building of the Shadwell Docks, where they were employed in the digging of foundations. Later on they were described as shore-rakers, and so were probably mudlarks in the sense that they scraped a living by selling the odds and ends of rope, coal, copper, etc., that they picked up.

A great deal of building was going on along the river bank at this time, and antiquaries frequently visited the sites to purchase anything that might be found. The workmen saw in their visits a very welcome means of obtaining beer-money, and so were constantly on the watch for anything that might be saleable. Unfortunately the Shadwell Dock excavations were not yielding as many finds as the workmen would have liked, and so Billie and Charlie decided to rectify this intolerable state of affairs. They began by casting lead medallions (Pl. XLII) with the heads of saints or kings and with cryptic lettering round the edges, along with a date in Arabic numerals. These curious objects vaguely resembled mediaeval pilgrim-signs, and when Billie and Charlie dug them out of the mud before the very eyes of the delighted antiquaries they sold like hot cakes. Soon Billie and Charlie

gave up labouring to concentrate on their new business, abandoning also the pantomime of finding the objects in the mud. Instead they sold them directly to a dealer.

In 1858 Mr. Syer Cummings, the Vice-President of the British Archaeological Association, exposed the fraud before a meeting of the Association and claimed that a dealer was selling the leaden forgeries knowing them to be fakes. His words were reported in a column of the *Athenaeum* newspaper on 8th May, 1858. The dealer, whose name was Eastwood, sued the paper for libel, and on 4th August the case was heard at Guildford Assizes.

Mr. Eastwood claimed that the lead medallions or signs were perfectly genuine, saying that he considered himself one of the best judges of such things in the United Kingdom. He told the court that he had purchased one thousand, one hundred signs and that he had paid three hundred and forty-six pounds for them. Billie later said in evidence that he had "obtained" about two thousand relics for which he and Charlie had been paid four hundred pounds. He stated that on occasions they earned as much as two pounds a day from the sale of their finds—no small sum a hundred years ago.

Two respected Fellows of the Society of Antiquaries were called to give evidence on Eastwood's behalf. One of them was none other than the redoubtable Charles Roach Smith, whose knowledge of London antiquities was unquestioned. He stated that without any doubt the signs were "genuine relics of antiquity" and might well date from the sixteenth century. His colleague was in full agreement, but felt that they might date somewhat earlier. At this stage in the hearing the judge ruled that there was no case of libel against the *Athenaeum*, as the paper had truthfully reported what had been said at the meeting. He pointed out that it had been laid down that what a man said in good faith in public discussion on matters concerning the public interest, even if spoken rashly or without truth, could not be considered a libel. A

verdict was then given for the defendant, without calling any witnesses to attack the authenticity of the Billie and Charlie products. As stated afterwards in the *Archaeological Journal*: "The result was considered in certain quarters to stamp upon these leaden objects an impress of antiquity."

For a time the two forgers prospered as never before, and their little factory in Rosemary Lane near the Tower was a veritable hive of industry, turning out a wide range of objects in lead and brass, some of them of great complexity. But their attackers were not satisfied with the results of the trial and eventually a Mr. Charles Reed managed to bribe a workman to steal examples of the moulds. These were exhibited to the Society of Antiquaries in 1860. History does not recall Roach Smith's reactions to this devastating evidence.

As a result of this exposure it became fashionable to blame all London's forged antiquities on to the Rosemary Hill firm. But this was quite without foundation, and the evidence shows that much more knowledgeable forgers were also at work. Be this as it may, Billie and Charlie remained in business together until the death of Charlie in 1870. In the same year Mr. Syer Cummings again rose up to tilt at the iniquitous forgeries and exhibited yet another Rosemary Lane product. He described it as: "A new type of forgery, made last September by William Monk, of the late notorious firm of 'Billie and Charlie'." Earlier records had shown that Billie's surname was Smith; yet this was no chance slip of the tongue, for Syer Cummings when referring to Charlie said of him: "Bad as this fellow was, he was an honourable man in comparison with his co-partner, William Monk." The answer may be that Billie used an alias, or that Charlie later obtained a new partner.

Billie and Charlie forgeries are still to be found in antique shops, and many of them still bear the faded labels so carefully attached to them by the credulous Victorian antiquaries.

Most of these labels tell us that the "relics" were found during Thames-side excavations, some at the Temple, many more during the building of the new Blackfriars Bridge, and a few even from as far away as Kew and Hampton Court. The strange history of Billie and Charlie has many extraordinary features, but none so remarkable as the fact that a pair of simple mudlarks, who could neither read nor write, were able successfully to deceive some of the most respected antiquaries of their day.

Much more dangerous were forgers who possessed a first-class knowledge of the genuine antiquities that served as their models. A number of excellent fakes were circulating in London during the third quarter of the nineteenth century, among them genuine Roman tiles with forged inscriptions, fragments of Roman pottery with faked *graffiti*, spindle-whorls and ornaments made from Roman potsherds, bronze statuettes and objects in bone and iron. At the time many of them were attributed to Billie and Charlie, but there can be no possible foundation for such an assumption. Among these clever forgeries may, perhaps, be numbered the Brentford shield (p. 40). Its decoration would seem to vary from early to late La Tène styles, with additions common to neither, while the handle and carrying-strap studs are comparable with those on Late Bronze Age shields. It may be significant that both the Battersea and Witham shields were originally backed with wood or leather. This being absent when they were found, there was no knowing the type of handles used or whether either shield had possessed a carrying-strap. It therefore goes without saying that the Brentford example could only have been conceived by someone with an extensive knowledge of Iron Age design and by a skilled metalworker with a considerable understanding of ancient techniques.

As mentioned earlier, a number of relics dating from our prehistoric eras though manufactured in the more advanced

Mediterranean countries have been found in the Thames. Many authorities refuse to believe that these objects found their way into the river in antiquity. They express the opinion that they have either been thrown into the water comparatively recently, or have been "planted" by unscrupulous antiquaries who might have wished to throw artificial light on British prehistory. The latter suggestion is, of course, most improbable, but the former demands serious consideration.

Apart from the finds discussed in Chapters 1 and 2, two further objects may be used in evidence. The first is an Attic *kylix* (Pl. IV), a shallow drinking cup, decorated on the inside with a figure of a crouching boy by the "Pythos painter" and dated to the fifth century B.C. This was dredged up near Reading and shows unmistakable scars resulting from a long sojourn in water. The second object, a bronze arrow-head stamped with the monogram of Queen Berenice of Cyrene, and so dated to the third century B.C., was recovered from the river Kennet near Reading on an angler's hook. Informed opinion at the British Museum considers it unlikely that this arrow-head was lost in antiquity. The same problems surround these objects as surround the Barn Elms cup, the Billingsgate *rhyton* or the model *hydria* from Barking Creek. In practically every case such discoveries have been made by people who were unaware of the age or place of origin of their finds. It therefore follows that they could not appreciate their possible significance. However, it would be foolish to assume that if a find is made by someone without an axe to grind it must, automatically, have spent its whole life in English soil. A bronze figure of an Egyptian god discovered in London Wall is one of many examples which remind us that there have been collectors of antiquities since time immemorial, and that, eventually, such collections are broken up and the exhibits lost or thrown away. In their own good time they reappear and pose problems to the surprised

archaeologist. If the pundits cannot accept the Mediterranean objects from the river as being relics of trade with the people of our Iron Age cultures, then the conclusion that they once formed part of a collection later broken up is the only reasonable one. Nevertheless it is one that possesses many flaws, and demands the acceptance of a series of remarkable coincidences. In many respects it is easier to accept the finds at their face value. Indeed, time may yet show that they are, in fact, genuine relics of ancient trade.

The sea has always nurtured tellers of tall stories, and the rivers also seem to breed their fair share. The Thames is no exception, and although the majority of tales concern fish some relate to relics that are said to have been found. There was the instance mentioned in Chapter 1 where an angler fishing from London Bridge claimed to have landed a circular shield. More recently another London Bridge story was circulating around the river-side pubs. Men working on a dredger above Billingsgate were said to have found a dagger with a hilt of solid gold; some went so far as to claim that it had been jewelled. But although exhaustive enquiries were made, no one ever traced either the dagger or the men who were supposed to have found it. A tall story? It may well be. But on the other hand a dagger could easily have been found, and to the unskilled eye a well-preserved bronze hilt might be mistaken for gold.

One has only to spend an hour talking to lightermen or warehousemen who have known the Thames all their lives to hear countless fascinating tales of the river. Many are apocryphal, some much embellished, and others true in nearly every detail. The difficulty is often to decide which is which. An old warehouseman whom I met some years ago claimed that when he was a young man the tide fell so low at Fresh Wharf that he had seen the piles of the old bridge sprouting from the mud. He and his mate had waded out and had cut off a sufficient number for him to be able to

build himself a garden seat. While preparing this book I tried to find the man to see whether he would tell the story again. But unfortunately I was too late ; he had died some months previously. Regardless of common sense, which keeps asking how he could have made a satisfactory seat from timbers that would have warped and shrunk as they dried, I still like to believe that in some suburban garden there stands a weather-beaten seat made from the timbers of Old London Bridge.

Fishing stories are traditionally centred on "the one that got away", and although fellow tipplers and clubmen may doubt them, they are difficult to disprove. With angling yarns it is, of course, not polite to attempt to do so, but in archaeology nothing can be accepted until the evidence is displayed for all to see. While walking on the north shore near Cannon Street Railway Bridge I once met an excited novice antiquary who said that on the previous day he had seen a Roman altar protruding from the water close by the bridge. He described it as a rectangular block of stone ornamented on one face by a Catherine-wheel design. Being somewhat green myself at that time, I swallowed the story hook, line and sinker and spent many an hour wading about beyond the low water mark in the hope of locating this remarkable object. Needless to say, I never found it. Perhaps the chap returned another day and salvaged the wretched thing himself, or perhaps it never existed at all. On the other hand it may still be there, having been dragged by the current into deeper water. That is the trouble with the river's tall stories; it is unwise to ignore any of them in case one should turn out to be true.

What Next?

THOSE of us who believe in prognosis, soothsayers or necromancy will readily believe that some people are so gifted that they can foretell where treasures will be found on archaeological sites, or what hidden wonders may still await discovery on the bed of the Thames. But without assistance of this kind one must cling to the facts and merely speculate on the possibility of future discoveries as indicated by existing evidence.

Firstly, it is fair to consider the kind of discoveries we would like to make. These could take innumerable forms, but would all be grouped together under the rather pompous heading of *Discoveries made under Controlled Conditions*—in other words, any finds that could be carefully excavated by skilled archaeologists, and not merely salvaged by unskilled observers or fished up by a dredger bucket. At once the field is narrowed almost to nothing, for ninety per cent of the river's antiquities have been recovered in one or other of these two ways.

As we have seen in earlier chapters, the river has been made considerably narrower by the constant encroachment of the buildings that have grown up along its banks. At other points above and below London the river has altered its course without the help of man. These changes have resulted in certain stretches of what was once river-bed becoming dry land, and conversely once habitable land now lies below the water at high tide. The standard examples of the latter

trend are provided by the Romano-British huts on the foreshores at Brentford and Tilbury, both sites having been scientifically excavated. Finds of this kind are unfortunately few and far between, but much more common are finds from river silt that has long been reclaimed by changes in the river frontage. All along the Thames from Westminster to Greenwich discoveries are being made whenever a new dock is excavated or a warehouse rebuilt. During the nineteenth century thousands of finds were made on sites in the City's Thames Street alone, and since then many more have come to light. The street was hit badly during the Second World War, with the result that many gaps still await redevelopment. This could provide an unparalleled opportunity to recover information while rebuilding is in progress.

The Corporation of London makes an effort to see that justice is now done to its historic remains, with the result that a more scientific approach to them has been possible since the war. But to off-set this improvement is the manner in which modern building work is conducted. Where once every hole was dug by hand, today bulldozers, grabs, face-shovels and drag-lines do the work in a fraction of the time, but ensure that the wretched archaeologist sees practically nothing of what is going on. It is true that he still finds objects, but many of them have been hauled out of their context before he reaches them. If by some lucky chance he finds them still *in situ*, he has little opportunity to deal with them before the machines are breathing down his neck. Luckily, however, there are river-side sites where the nature of the ground makes it impracticable to use heavy machinery, and this also applies when only a small area is to be excavated. But more often than not builders try to avoid deep excavation near the river, and instead of removing the silt to find a solid bed for their foundations, they drive piles through it and build a concrete raft over the top. Under these conditions the archaeologist sees nothing save for the few tantalizing

scraps that are hauled up by the boring equipment. Thus, for the antiquary, progress is not always an asset.

While considering the dried bed that flanks the modern channel we must not forget the tributaries, notably the lost rivers of the City, the Fleet and the Walbrook. The Fleet certainly contains many undiscovered antiquities, and we can expect that these will one day turn up during building operations near Blackfriars', Holborn Viaduct and Farringdon Street. Few of these relics are likely to be of any great archaeological significance, for the Fleet lay outside the City walls, and, although it was used as a rubbish tip, that fact does not make it important. The citizens of Londinium buried their dead beyond the tributary's west bank and so must have carried the coffins and cremation urns across it. But there is no evidence that its waters were used for any ritual purpose. Even if they were, there would be few traces left for an archaeologist to find. The most he can expect of the Roman Fleet would be to find the timber foundations of small bridges on the line of roads running from Ludgate and Newgate.

In contrast, the Walbrook streams and valley were in the very heart of Roman London, and so must have played an important part in the moulding of the City. But the completion of Bucklersbury House, on whose site the temple of Mithras was found, has removed one of the most important stretches of the valley. The remaining unexcavated areas should, by all the rules, yield a good deal less. The majority of finds from the Walbrook came from the sites of the Bank of England and the National Safe Deposit which stands close to the Mansion House. As the layers of black silt slope towards the Thames they seem to contain fewer Roman relics, suggesting, perhaps, that then as now the commercial centre lay in the vicinity of the Bank. It is possible, therefore, that blitzed sites awaiting development at the "mouth" of the Walbrook near Dowgate may not prove as productive as

might formerly have been hoped. But prophecies are invariably belied, and it may well be that the Walbrook silt still hides many an unsuspected treasure.

But what of the Thames itself? On the face of the evidence the chances of a rosy archaeological future are not good. Modern dredging methods are too efficient to permit many relics to be salvaged from the buckets. It would be quite impossible to expect the Port of London Authority to order the silt to be searched before being carried away, and no one in his right mind would expect them to do so. On the other hand, if we must abandon all hope of anything being found by the dredgers, the outlook would be bleak indeed. Luckily all dredgers are not of the same type, and on some it is possible to keep a rough look-out for anything that may seem interesting. The P.L.A. has, in fact, issued a directive requiring that all finds should be handed to the Authority's librarian. It adds, however, the very natural rider that the watching should not interfere with the job in hand.

The Thames Conservancy Board, which is now only concerned with the course of the river above Teddington Lock, is equally conscious of its duty to archaeology, and I understand that a small reward is given to any man who recovers an object of interest while dredging. It is not in the least disparaging to the P.L.A. to note that the results shown by the Conservancy Board are much more impressive in consequence. But it is also true that the T.C.B. is on a rather better wicket, for their dredgers often work in reaches that have not been scoured time and time again. P.L.A. dredgers, on the other hand, are concerned primarily with the maintenance of specific, much-dredged channels.

The building of bridges has, in the past, provided one of the most productive sources of Thames relics; notably the mass of material recovered during the building of the present, and the destruction of the old, London Bridge. Important also were the many impressive finds from Chelsea Bridge.

Eventually new bridges will take the place of existing structures and new foundations will be laid down to one side of the old. But here again modern engineering methods will do their best to ensure that there is little opportunity for archaeological research.

All in all the prospect seems gloomy. Many experts will point out that relics recovered during dredging or bridge-building cannot be seen *in situ*, and so are not worth finding. But this is not a valid argument, for many of the river's treasures are objects of importance regardless of their lack of context. No one in his senses would dismiss the Battersea shield, the Waterloo helmet or the Hadrian head as of no importance. It is worth remembering, too, that these priceless relics would probably have decayed almost to nothing had they been recovered from the soil of a normal archaeological excavation. But by courtesy of the Thames silt we can see these treasures virtually intact and able to take their place among the finest relics of non-precious metals ever found in this country. On this count alone it would be deplorable not to care whether the Thames may be allowed to give back more of its treasures.

Before considering the foreshore and its future, it seems opportune to pause and consider what we would like to see recovered from the bed, providing that fate and the dredgers are kind. One thing must surely stand out above all others, and that is the rest of the great statue from which the Hadrian head had been removed. Admittedly, other pieces of bronze statuary have been found in the City, but no one has yet gone further than to suggest that any of them might have belonged to the London Bridge head. It is just possible that after the body had been decapitated it too was thrown into the river. Unfortunately it is more probable that the drowning of the emperor's head was a sufficiently symbolic action, and that the iconoclasts then turned to more practical considerations and melted the rest down for scrap.

It would be very satisfying to discover the point at which Caesar crossed the river, and so end the controversy that still goes on between local historians who insist on claiming the honour for their own boroughs. But much more valuable would be an opportunity to conduct an excavation that would uncover a stretch of the southern city wall, and enable a section to be drawn showing the relationship of the river's edge in Roman times to that wall.

Finally, what of the foreshore and its mudlarking treasures? Again the prospect is not bright, for too many people have tried their hand at it. Soon after the Second World War the river's trinket box was opened virtually for the first time, and everything that could readily be seen was taken by the many mudlarks who foraged *en masse*.

As recently as 1950 it was possible to walk along the shore and expect to find at least fifteen or twenty objects that were worth retaining. At the time of writing, however, it is possible to go over that ground half a dozen times and find nothing. But even now occasional objects appear which are equally as interesting and exciting as anything that was found in years gone by. There is every reason to suppose that beneath the mud many relics still wait for the tides that will draw them to the surface. When that happens there may still be a few mudlarks who have not lost heart and who are ready to retrieve them. The river-side antiquary must change his temperament to suit the new conditions. He needs the skill, eyesight and patience of an angler who sets out with rod and line and is content to catch a minnow. There is no longer any place on the river for the mudlark who expects to ape the commercial fisherman who uses a net to catch a hundred fish.

It could be argued that because the finds are no longer to be seen on the surface, the antiquary should start to dig for them. This would be a complete waste of time, beside laying the digger open to a charge of damaging the foreshore.

The Port of London Authority and the various wharfingers take great care to ensure that the surface is not disturbed, for once the skin is damaged the less stable mud beneath can be quickly eroded by the tides. One of the City's most productive stretches of foreshore is now sealed beneath a bed of chalk hard-core laid down to prevent such occurrences.

Above and below the City the story is rather different. Many of the foreshores are less used by lighters or barges, and so are less protected by layers of modern hard-core. For this reason they are also very much more dangerous. At Westminster numerous mudlarking finds have been made, while others are still to be made at Chelsea, Fulham, Hammersmith, Mortlake and Brentford—indeed, wherever human habitation has existed for any length of time.

Below the City there are numerous stretches of foreshore that lie exposed at low tide, but owing to their intensive use most of them are sealed by layers of hard-core. This is not always the case, and at Greenwich local mudlarks have been finding as interesting and almost as varied a range of antiquities as have graced the City's shore.

The discovery of antiquities in the Thames has often been mirrored by finds from other tidal rivers in Great Britain and overseas. But before you dash out to try your luck in the Thames or elsewhere it would be as well to heed the gypsy's warning. Rivers contain a great deal of water, and their foreshores when left to themselves are made up of silt and thick, surface mud. Both water and mud are dangerous and either can provide a death-trap for the unwary. It is not enough to own a chart and a schedule of tides, for the stretches marked *Hard* on the chart may be treacherously soft in patches, while the tides do not always ebb and flow according to the book. Finally, one must never lose sight of the fact that the Thames foreshore is not public property. The relevant authorities can

refuse access to the shore, turn one off it and lay claim to any antiquities that may be found there.

In a nut-shell the river cries out not for private collectors, but for local museums who can patrol their own shores and so preserve for the nation the Treasure that still lies in the Thames.

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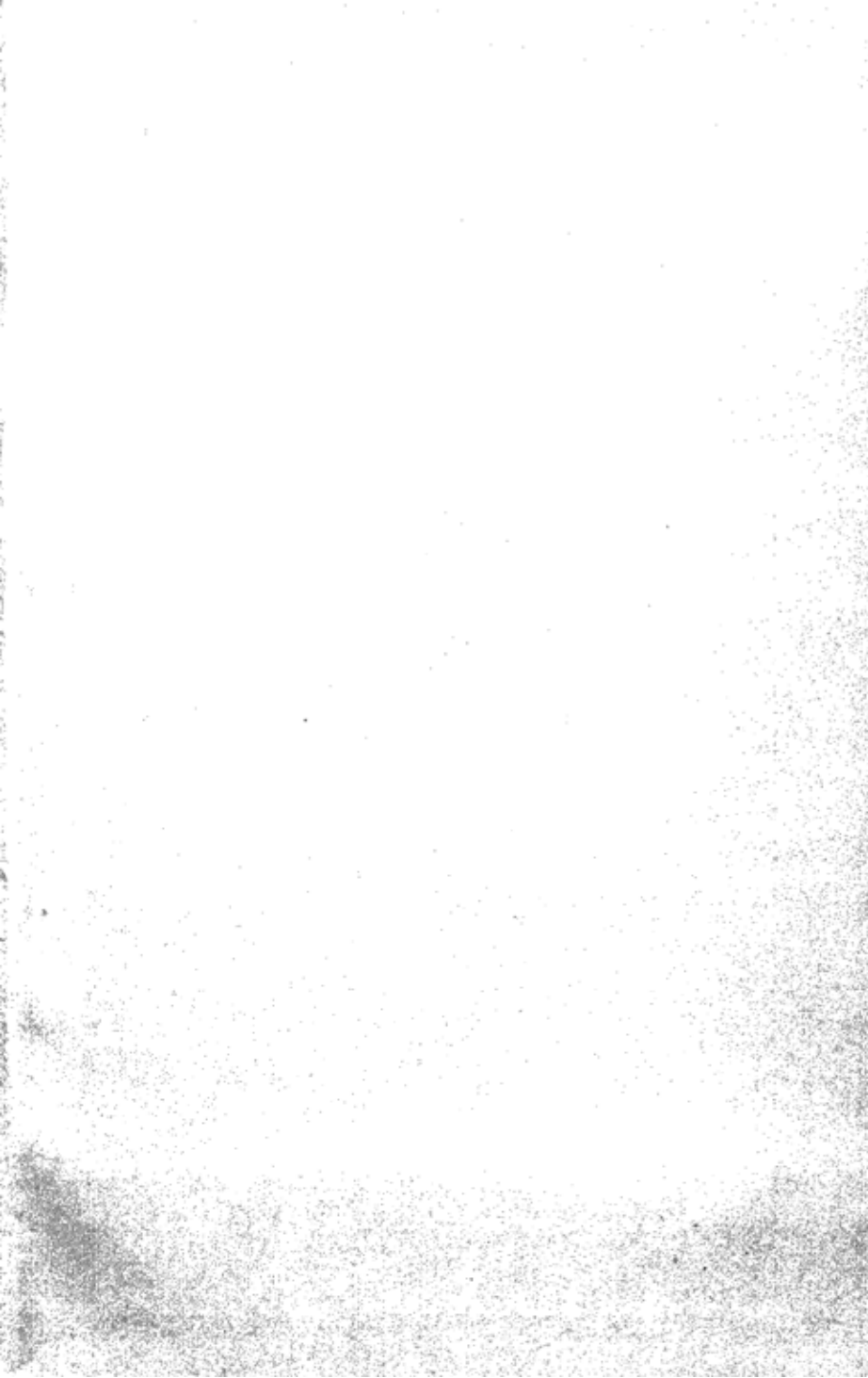
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